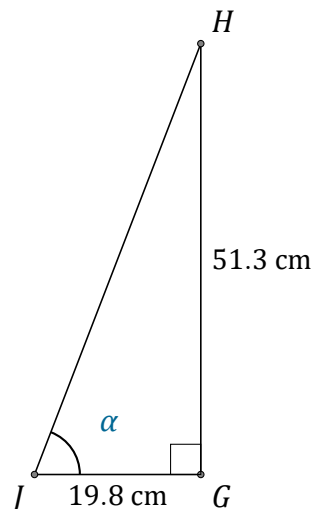


Tangent Ratio (A)

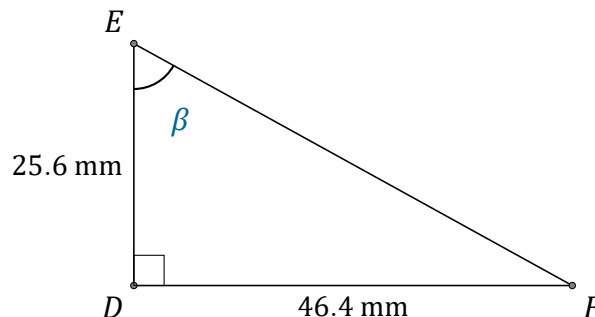
Name: _____

Date: _____

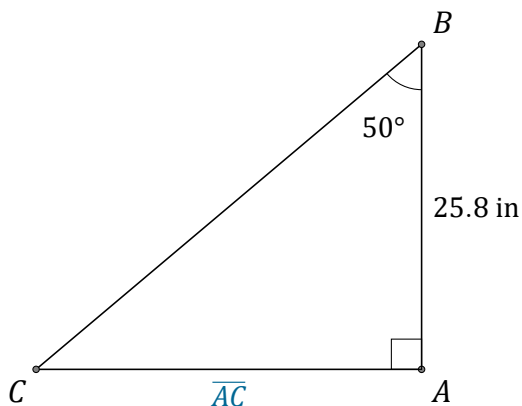
Calculate the angle and side values using the tangent ratio: $\tan(\alpha) = \frac{O}{A}$



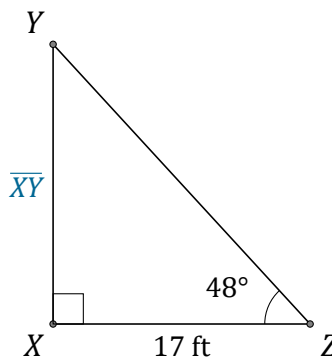
$\alpha = \angle GJH =$ _____



$\beta = \angle DEF =$ _____



$\overline{AC} =$ _____



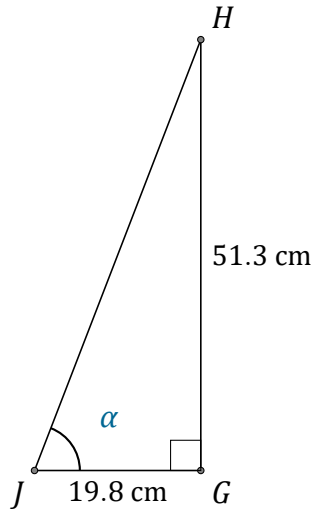
$\overline{XY} =$ _____

Tangent Ratio (A) Answers

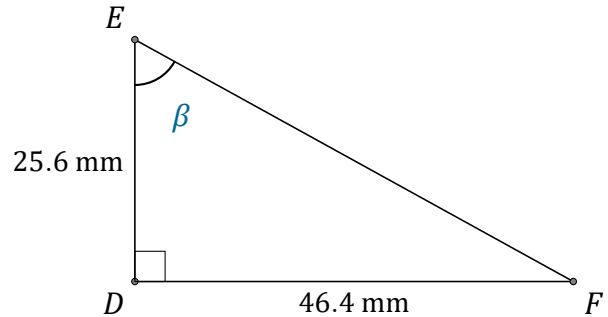
Name: _____

Date: _____

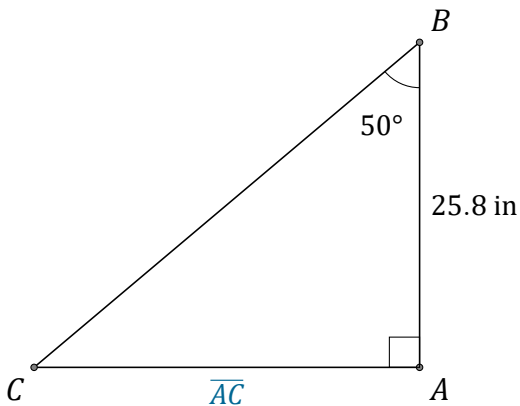
Calculate the angle and side values using the tangent ratio: $\tan(\alpha) = \frac{O}{A}$



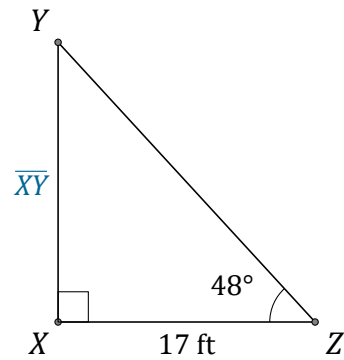
$$\alpha = \angle GJH = \underline{68.9^\circ}$$



$$\beta = \angle DEF = \underline{61.1^\circ}$$



$$\overline{AC} = \underline{30.7 \text{ in}}$$



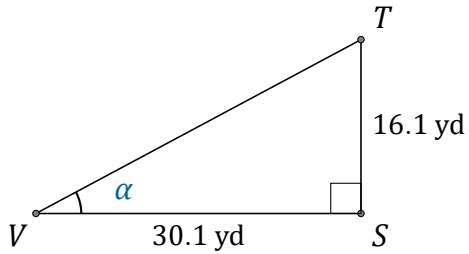
$$\overline{XY} = \underline{18.9 \text{ ft}}$$

Tangent Ratio (B)

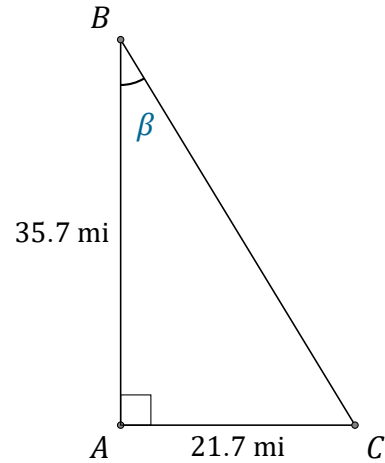
Name: _____

Date: _____

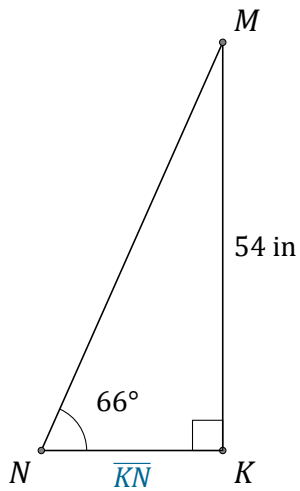
Calculate the angle and side values using the tangent ratio: $\tan(\alpha) = \frac{O}{A}$



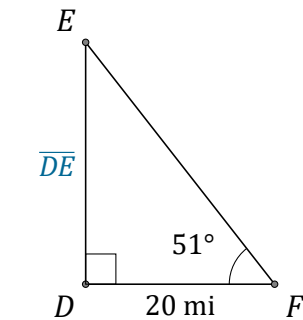
$\alpha = \angle SVT =$ _____



$\beta = \angle ABC =$ _____



$\overline{KN} =$ _____



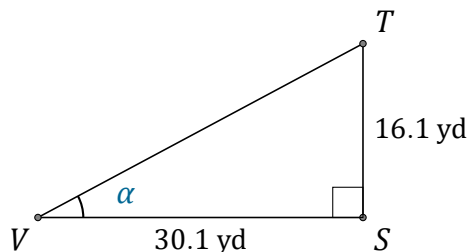
$\overline{DE} =$ _____

Tangent Ratio (B) Answers

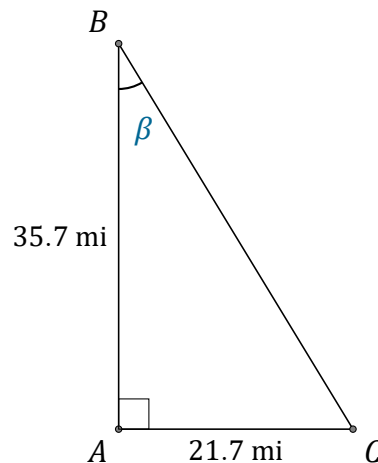
Name: _____

Date: _____

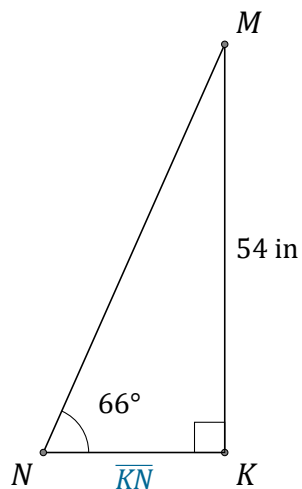
Calculate the angle and side values using the tangent ratio: $\tan(\alpha) = \frac{O}{A}$



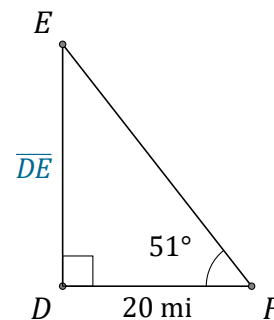
$$\alpha = \angle SVT = \underline{28.1^\circ}$$



$$\beta = \angle ABC = \underline{31.3^\circ}$$



$$\overline{KN} = \underline{24 \text{ in}}$$



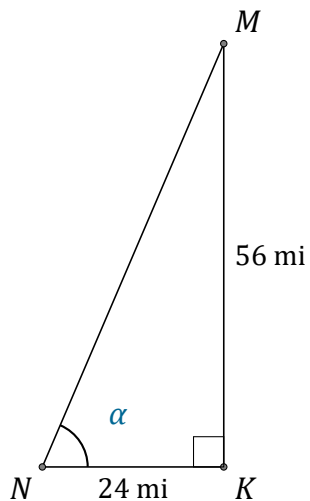
$$\overline{DE} = \underline{24.7 \text{ mi}}$$

Tangent Ratio (C)

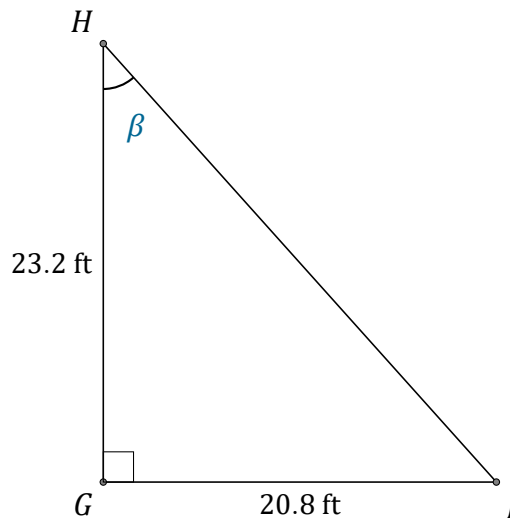
Name: _____

Date: _____

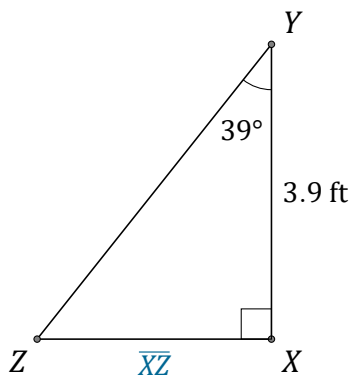
Calculate the angle and side values using the tangent ratio: $\tan(\alpha) = \frac{O}{A}$



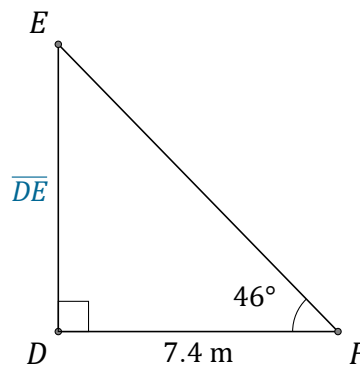
$\alpha = \angle KNM =$ _____



$\beta = \angle GHJ =$ _____



$\overline{XZ} =$ _____



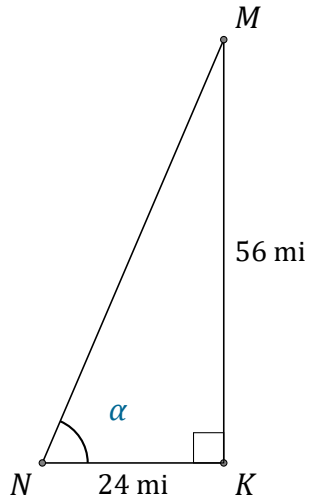
$\overline{DE} =$ _____

Tangent Ratio (C) Answers

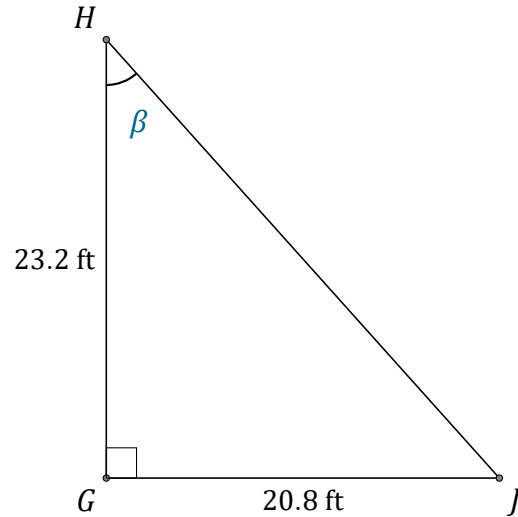
Name: _____

Date: _____

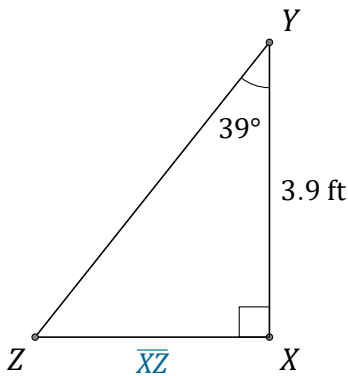
Calculate the angle and side values using the tangent ratio: $\tan(\alpha) = \frac{O}{A}$



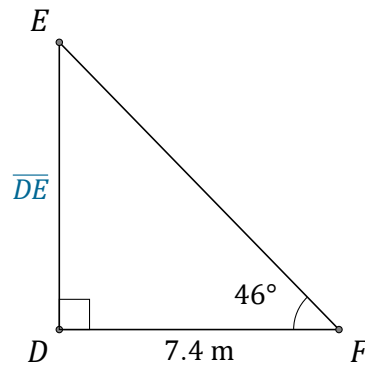
$\alpha = \angle KNM = \underline{66.8^\circ}$



$\beta = \angle GHJ = \underline{41.9^\circ}$



$\overline{XZ} = \underline{3.2 \text{ ft}}$



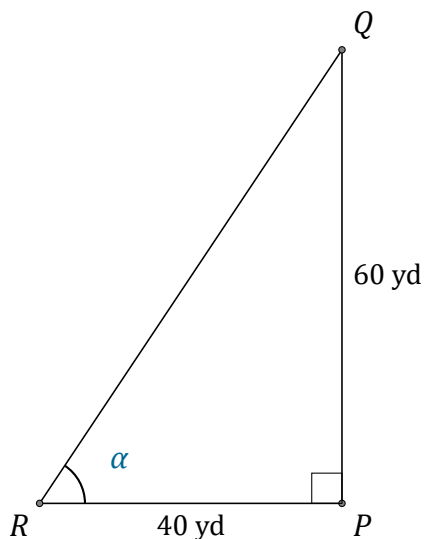
$\overline{DE} = \underline{7.7 \text{ m}}$

Tangent Ratio (D)

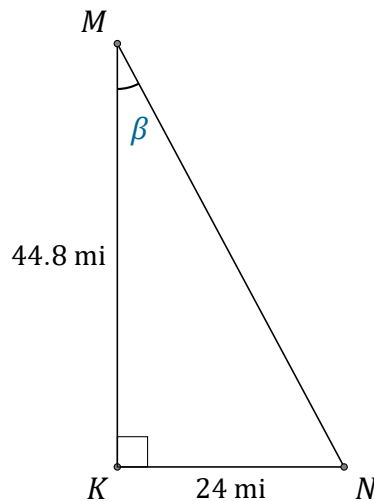
Name: _____

Date: _____

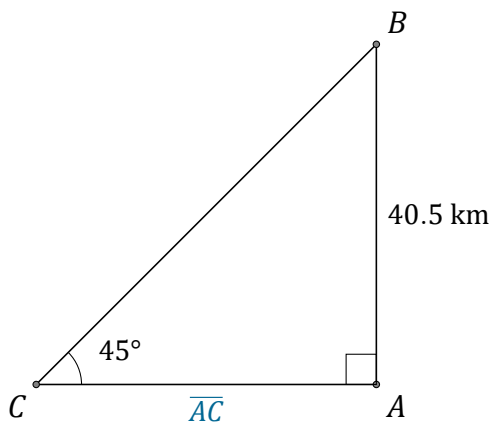
Calculate the angle and side values using the tangent ratio: $\tan(\alpha) = \frac{O}{A}$



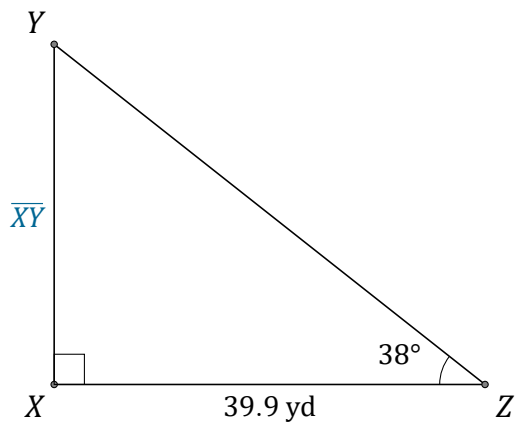
$\alpha = \angle PRQ =$ _____



$\beta = \angle KMN =$ _____



$\overline{AC} =$ _____



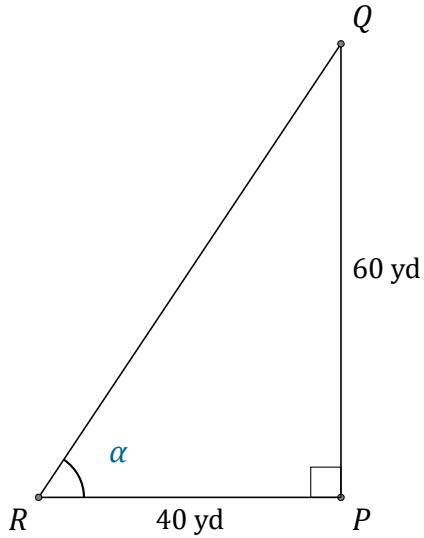
$\overline{XY} =$ _____

Tangent Ratio (D) Answers

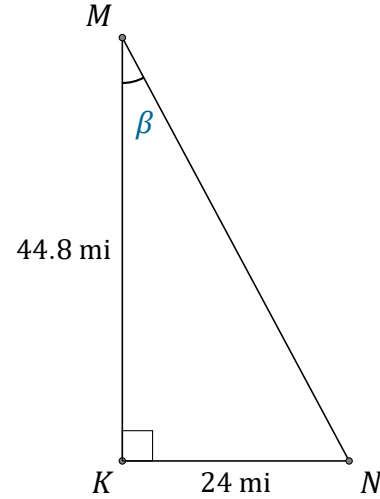
Name: _____

Date: _____

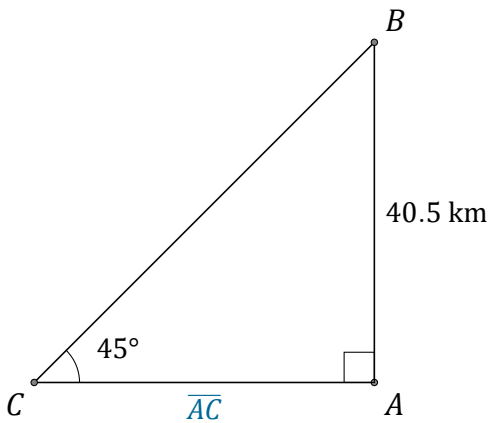
Calculate the angle and side values using the tangent ratio: $\tan(\alpha) = \frac{O}{A}$



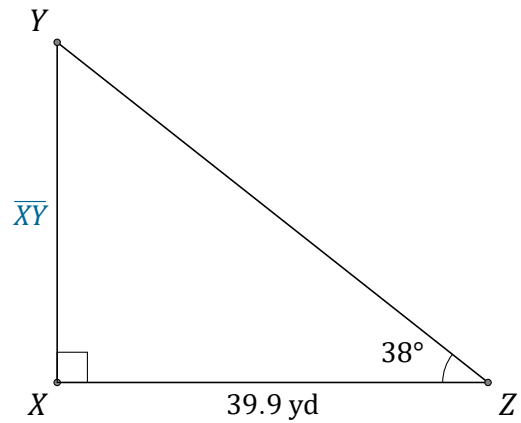
$$\alpha = \angle PRQ = \underline{56.3^\circ}$$



$$\beta = \angle KMN = \underline{28.2^\circ}$$



$$\overline{AC} = \underline{40.5 \text{ km}}$$



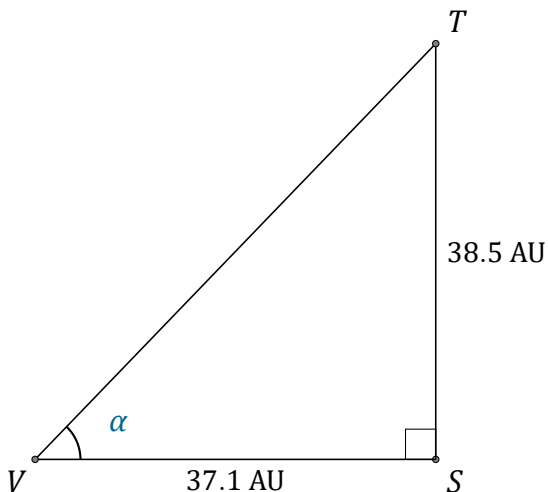
$$\overline{XY} = \underline{31.2 \text{ yd}}$$

Tangent Ratio (E)

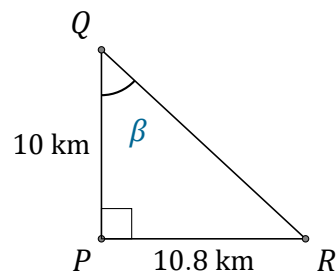
Name: _____

Date: _____

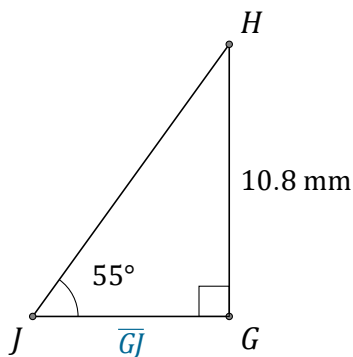
Calculate the angle and side values using the tangent ratio: $\tan(\alpha) = \frac{O}{A}$



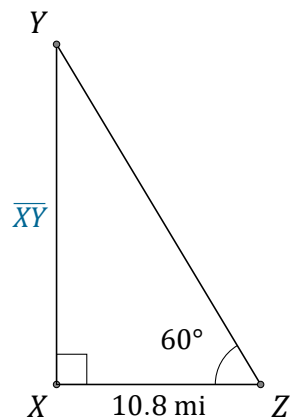
$\alpha = \angle SVT =$ _____



$\beta = \angle PQR =$ _____



$\overline{GJ} =$ _____



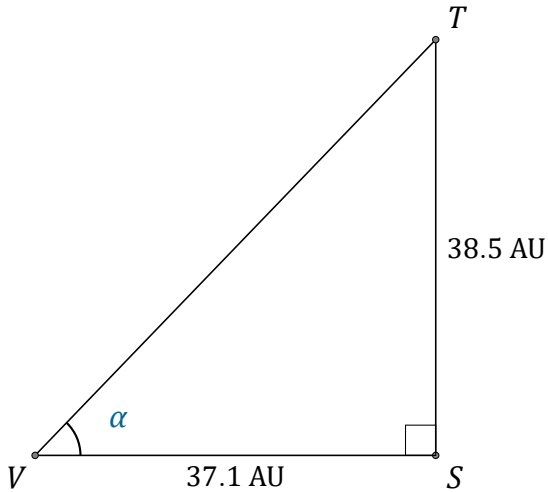
$\overline{XY} =$ _____

Tangent Ratio (E) Answers

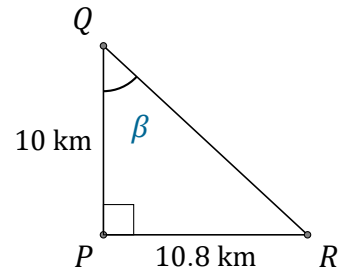
Name: _____

Date: _____

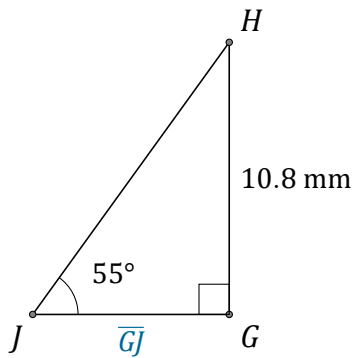
Calculate the angle and side values using the tangent ratio: $\tan(\alpha) = \frac{O}{A}$



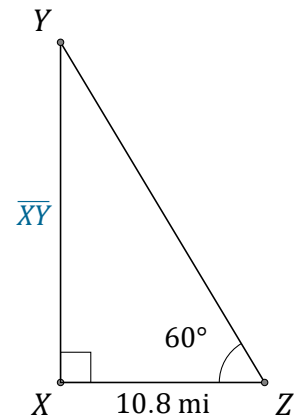
$$\alpha = \angle SVT = \underline{46.1^\circ}$$



$$\beta = \angle PQR = \underline{47.2^\circ}$$



$$\overline{GJ} = \underline{7.6 \text{ mm}}$$



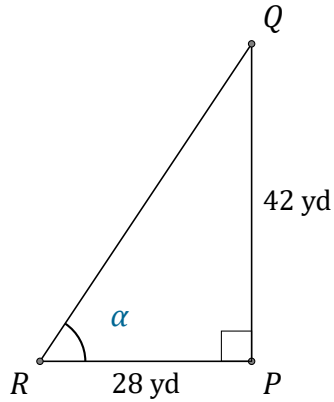
$$\overline{XY} = \underline{18.7 \text{ mi}}$$

Tangent Ratio (F)

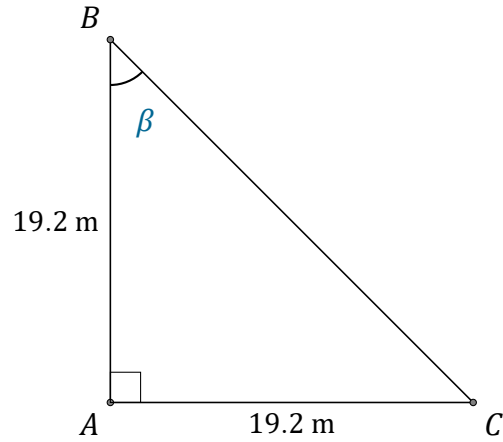
Name: _____

Date: _____

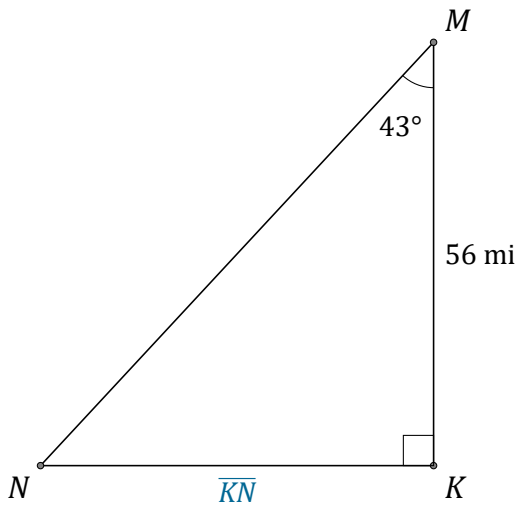
Calculate the angle and side values using the tangent ratio: $\tan(\alpha) = \frac{O}{A}$



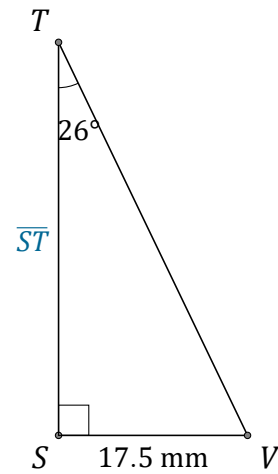
$\alpha = \angle PRQ =$ _____



$\beta = \angle ABC =$ _____



$\overline{KN} =$ _____



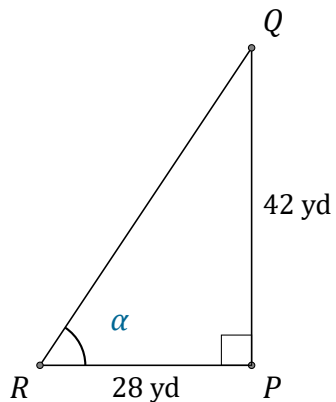
$\overline{ST} =$ _____

Tangent Ratio (F) Answers

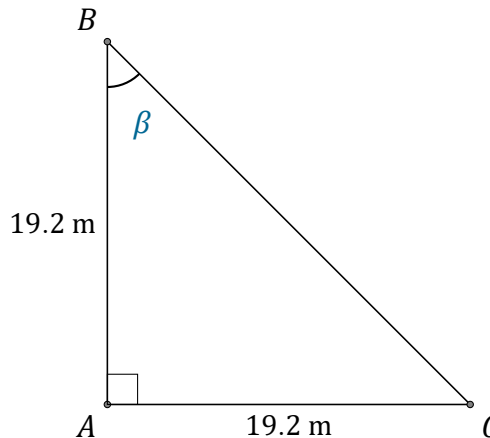
Name: _____

Date: _____

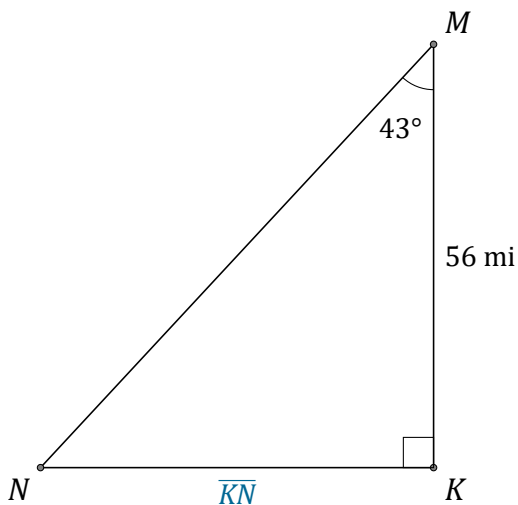
Calculate the angle and side values using the tangent ratio: $\tan(\alpha) = \frac{O}{A}$



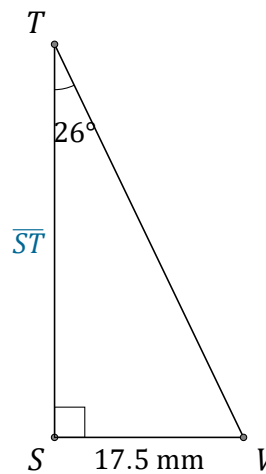
$$\alpha = \angle PRQ = \underline{56.3^\circ}$$



$$\beta = \angle ABC = \underline{45^\circ}$$



$$\overline{KN} = \underline{52.2 \text{ mi}}$$



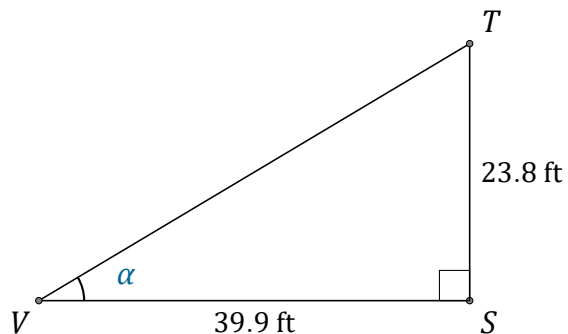
$$\overline{ST} = \underline{35.9 \text{ mm}}$$

Tangent Ratio (G)

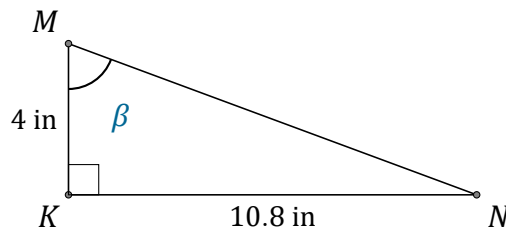
Name: _____

Date: _____

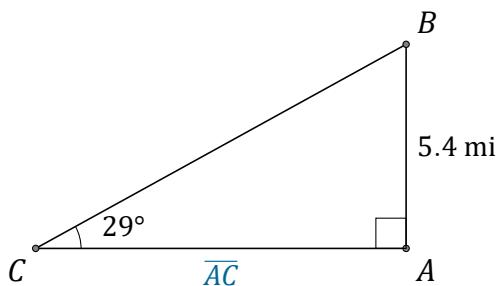
Calculate the angle and side values using the tangent ratio: $\tan(\alpha) = \frac{O}{A}$



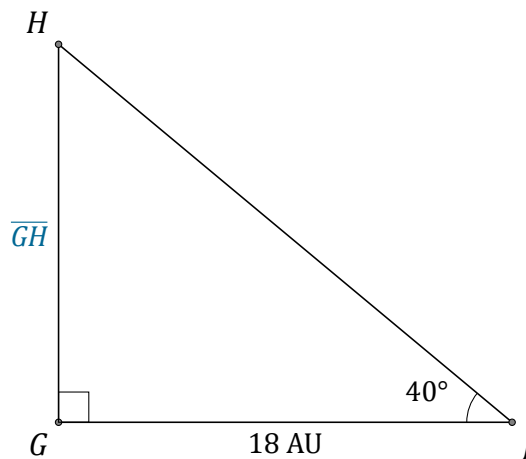
$\alpha = \angle SVT =$ _____



$\beta = \angle KMN =$ _____



$\overline{AC} =$ _____



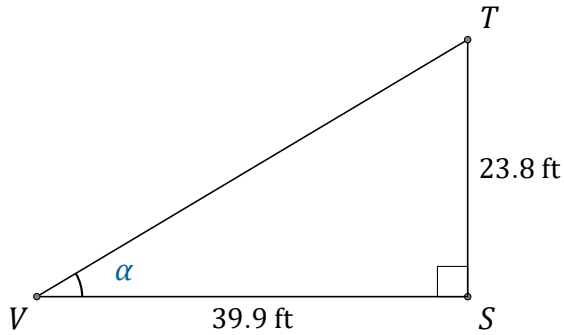
$\overline{GH} =$ _____

Tangent Ratio (G) Answers

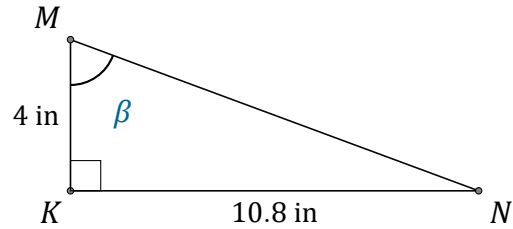
Name: _____

Date: _____

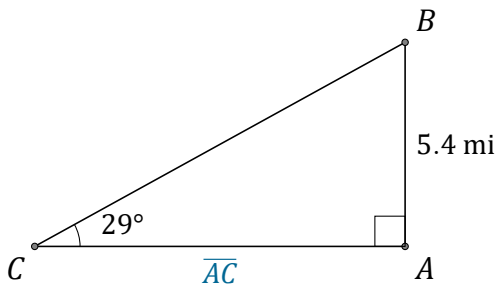
Calculate the angle and side values using the tangent ratio: $\tan(\alpha) = \frac{O}{A}$



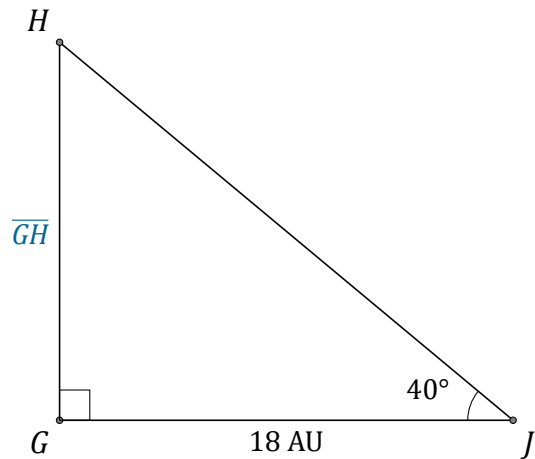
$$\alpha = \angle SVT = \underline{30.8^\circ}$$



$$\beta = \angle KMN = \underline{69.7^\circ}$$



$$\overline{AC} = \underline{9.7 \text{ mi}}$$



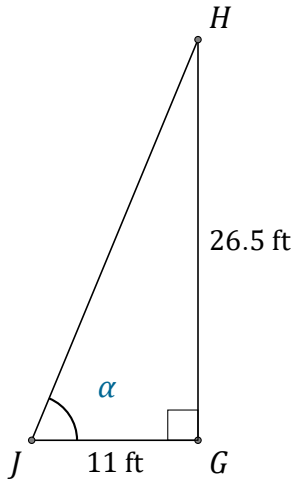
$$\overline{GH} = \underline{15.1 \text{ AU}}$$

Tangent Ratio (H)

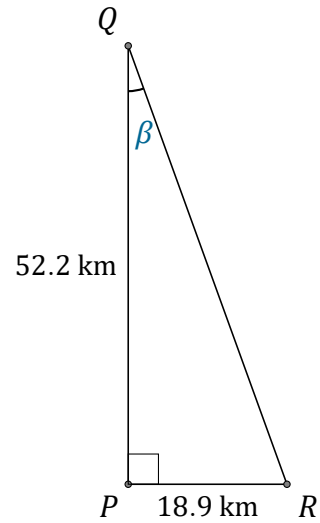
Name: _____

Date: _____

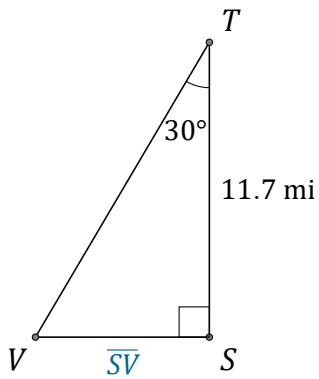
Calculate the angle and side values using the tangent ratio: $\tan(\alpha) = \frac{O}{A}$



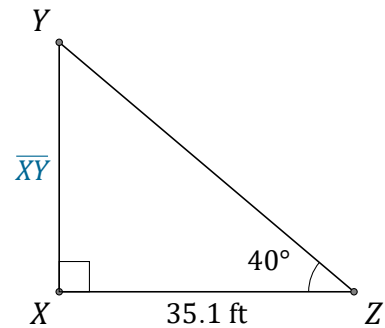
$\alpha = \angle GJH =$ _____



$\beta = \angle PQR =$ _____



$\overline{SV} =$ _____



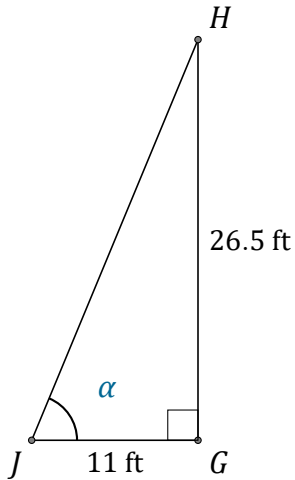
$\overline{XY} =$ _____

Tangent Ratio (H) Answers

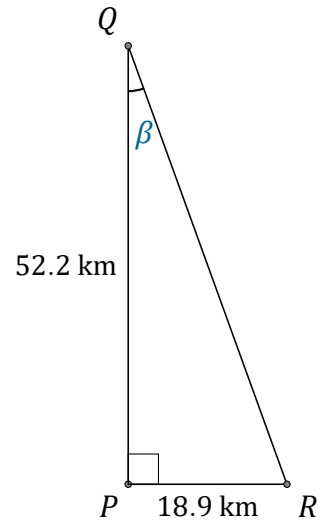
Name: _____

Date: _____

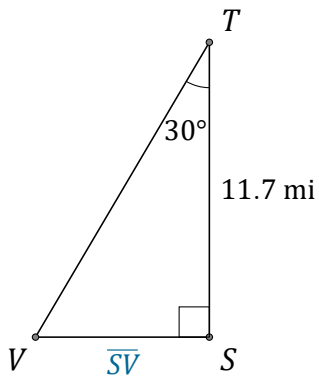
Calculate the angle and side values using the tangent ratio: $\tan(\alpha) = \frac{O}{A}$



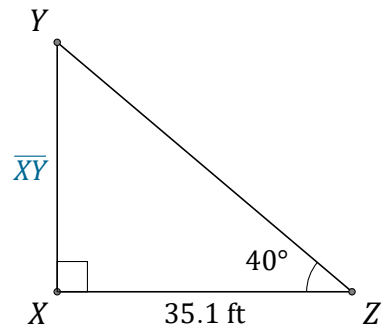
$\alpha = \angle GJH = \underline{67.5^\circ}$



$\beta = \angle PQR = \underline{19.9^\circ}$



$\overline{SV} = \underline{6.8 \text{ mi}}$



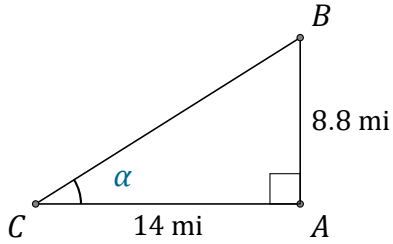
$\overline{XY} = \underline{29.5 \text{ ft}}$

Tangent Ratio (I)

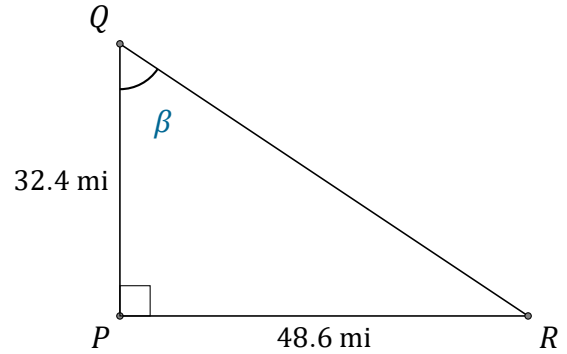
Name: _____

Date: _____

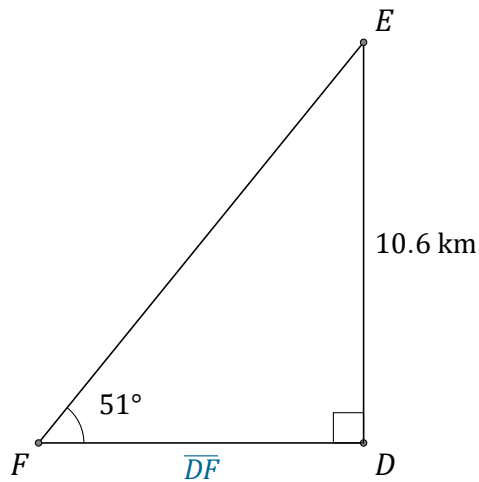
Calculate the angle and side values using the tangent ratio: $\tan(\alpha) = \frac{O}{A}$



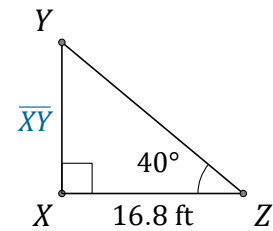
$\alpha = \angle ACB =$ _____



$\beta = \angle PQR =$ _____



$\overline{DF} =$ _____



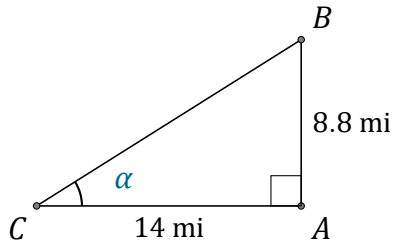
$\overline{XY} =$ _____

Tangent Ratio (I) Answers

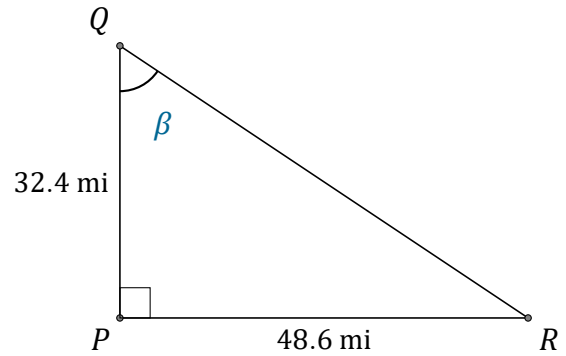
Name: _____

Date: _____

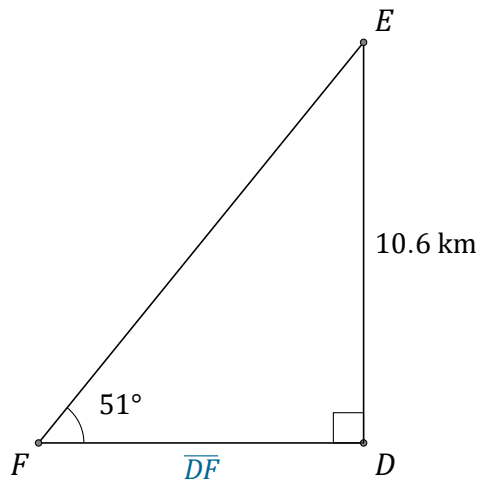
Calculate the angle and side values using the tangent ratio: $\tan(\alpha) = \frac{O}{A}$



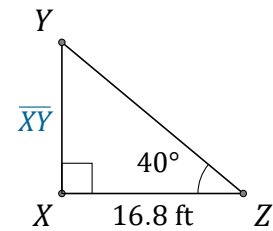
$$\alpha = \angle ACB = \underline{32.2^\circ}$$



$$\beta = \angle PQR = \underline{56.3^\circ}$$



$$\overline{DF} = \underline{8.6 \text{ km}}$$



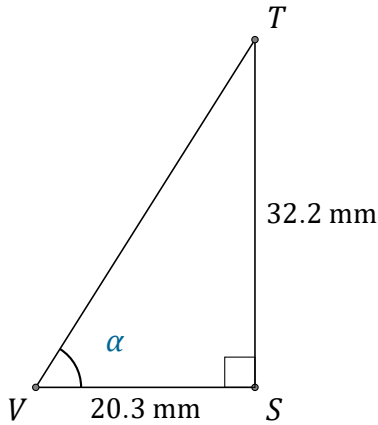
$$\overline{XY} = \underline{14.1 \text{ ft}}$$

Tangent Ratio (J)

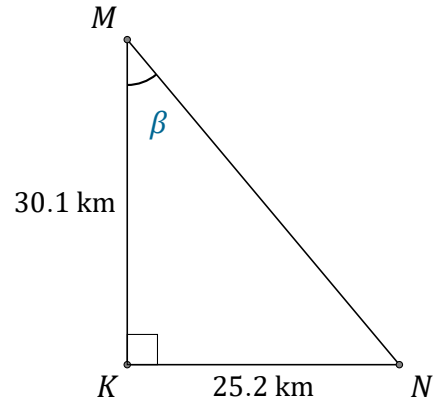
Name: _____

Date: _____

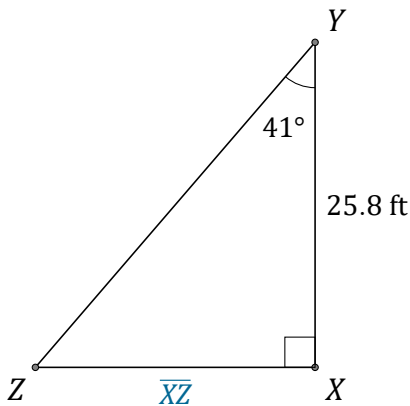
Calculate the angle and side values using the tangent ratio: $\tan(\alpha) = \frac{O}{A}$



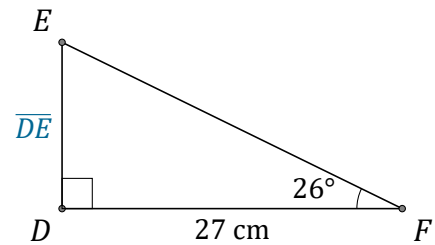
$\alpha = \angle SVT =$ _____



$\beta = \angle KMN =$ _____



$\overline{XZ} =$ _____



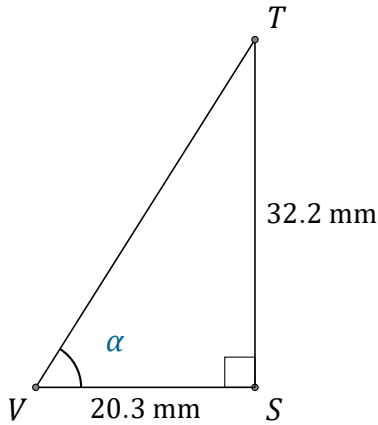
$\overline{DE} =$ _____

Tangent Ratio (J) Answers

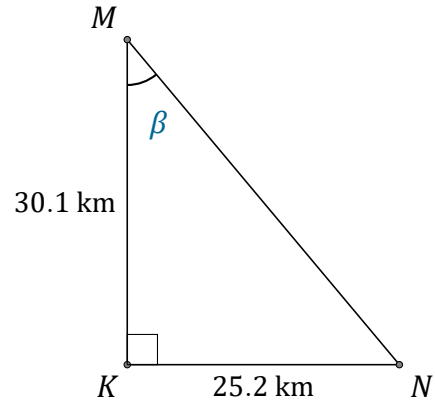
Name: _____

Date: _____

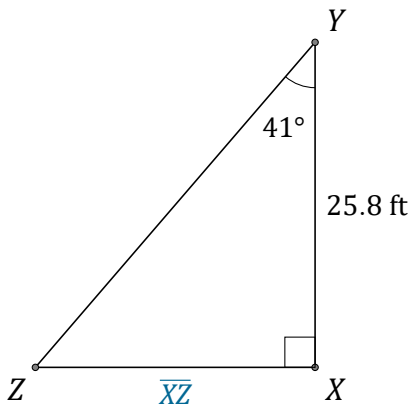
Calculate the angle and side values using the tangent ratio: $\tan(\alpha) = \frac{O}{A}$



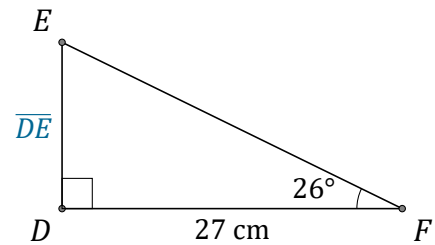
$$\alpha = \angle SVT = \underline{57.8^\circ}$$



$$\beta = \angle KMN = \underline{39.9^\circ}$$



$$\overline{XZ} = \underline{22.4 \text{ ft}}$$



$$\overline{DE} = \underline{13.2 \text{ cm}}$$