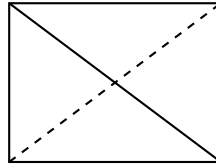


Name:

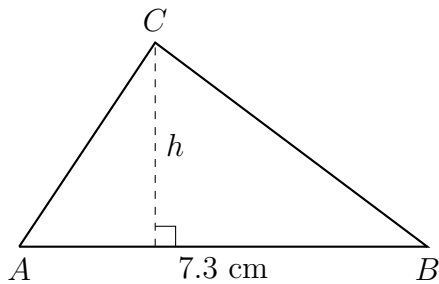
9.5 Do Now: Angle relationships

1. The figure shows a rectangle (not a square).

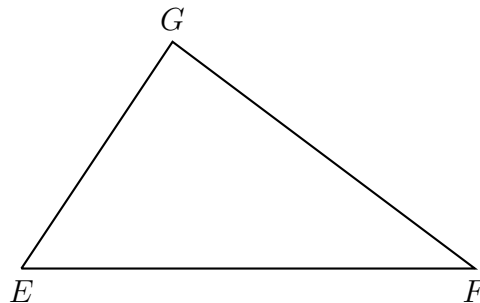


Which transformations carries the rectangle onto itself? Mark each True or False.

- (a) A clockwise rotation of 90° about the intersection of the diagonals True False
(b) A clockwise rotation of 180° about the intersection of the diagonals True False
(c) A reflection over the solid diagonal True False
(d) A reflection over the dashed diagonal True False
2. Find the area of $\triangle ABC$, $Area = \frac{1}{2}bh$. The altitude h of the triangle is 4 centimeters and the base $AB = 7.3$ cm.



3. Given $\triangle EFG$ with $m\angle E = (10x)^\circ$, $m\angle F = 40^\circ$ and $m\angle G = (6x + 60)^\circ$, find x .



4. In the diagram below, the chords \overline{AE} and \overline{BD} intersect at C , with $m\angle ACB = 5x - 5$, $m\angle DCE = 4x + 11$.

(a) Justify $\angle ACB \cong \angle DCE$.

(b) Find x .

(c) Given that $m\widehat{AFD} = 140^\circ$. Find $m\angle E$. Find $m\angle B$.

(d) Find $m\angle D$.

(e) Find the measure of \widehat{BE} .

