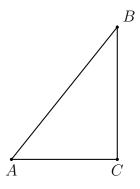
Do Now: Trigonometric ratios

Show each step, justify each by writing the name of a theorem to the right.

1. Given right $\triangle ABC$ with $AC=4, BC=5, AB=6.4, \, m\angle C=90^{\circ}$. Express each trig ratio as a fraction, then as a decimal to the nearest thousandth. (1a is an example)

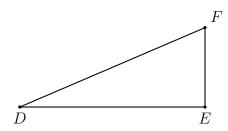


(a)
$$\sin A = \frac{5}{6.4} = 0.781$$

(b)
$$\cos A =$$

(c)
$$\tan A =$$

2. Given right $\triangle DEF$ with DE = 7, EF = 3, DF = 7.6, $m \angle E = 90^{\circ}$. Express each trig ratio as a fraction, then as a decimal to the nearest thousandth.



(a)
$$\sin F =$$

(d)
$$\sin D =$$

(b)
$$\cos F =$$

(e)
$$\cos D =$$

(c)
$$\tan F =$$

(f)
$$\tan D =$$

Classwork: Use a calculator for trig ratio

3. Express the result to the nearest thousandth.

(a)
$$\sin 30^{\circ} =$$

(d)
$$\sin 57^{\circ} =$$

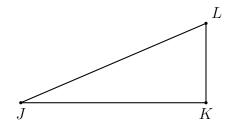
(b)
$$\cos 45^{\circ} =$$

(e)
$$\cos 23^{\circ} =$$

(c)
$$\tan 60^{\circ} =$$

(f)
$$\tan 81^{\circ} =$$

4. Given right $\triangle JKL$ with $\overline{JK} \perp \overline{KL}$, JL = 10, $m \angle J = 25^{\circ}$.



(a) Find the length JK

(b) Find the length KL