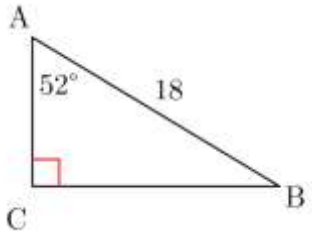
SRT-C6a

Practice Assessment Q3 #2

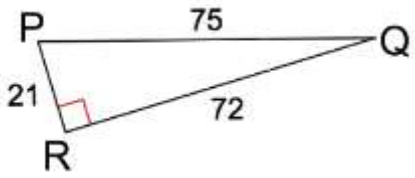
1. A right triangle has legs 10 and 24. Find $\cos\theta$, where θ is the smallest angle in the triangle. Give your answer as a reduced fraction.

2. If $\tan\theta = \frac{7}{24}$, find $\sin\theta$.

3. Find the length of AC.



4. Find the measure of $\angle P$



SRT-C7a

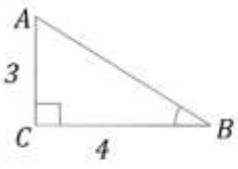
5. $\sin(27°)$ is equal to the cosine of what angle measure?

6. A and B are complementary angles. If $\tan A = \frac{20}{21}$, find $\cos B$.

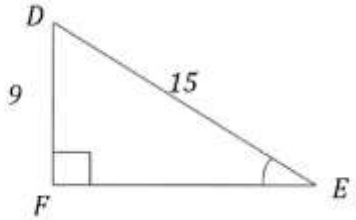
7. Find the value of θ if $\cos(3\theta + 4) = \sin(2\theta + 11)$

8. Which of the following is equivalent to $\sin E$? Select ALL that apply.

[ ] cos D
[ ] sin D
[ ] tan A
[ ] sin B
[ ] tan E
[ ] cos A
[ ] sin A

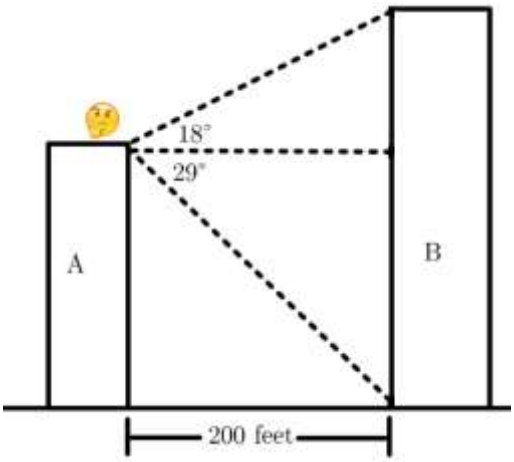


$\Delta ABC \sim \Delta DEF$



SRT-C8a

9. A person is at the top of a building and uses a clinometer to measure the angles of elevation and depression to the top and bottom of another, taller building located 200 feet away [see figure below]. How tall, to the nearest foot, is each building?



10. A 3 foot long wood board is being used as a makeshift ramp to reach an elevated platform that is 1 foot above the ground [see below]. If the angle the board makes with the ground is 20° or greater, it will not be safe to use. Is the ramp safe to use? Show the calculations that lead to your conclusion.