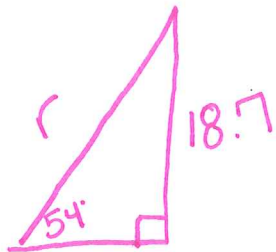
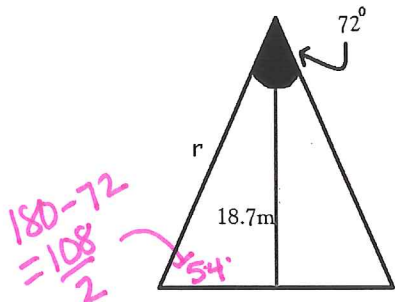


Key

Extra Practice Examples: Finding the Radius

1. Find r if the triangle is isosceles.

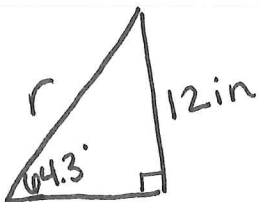
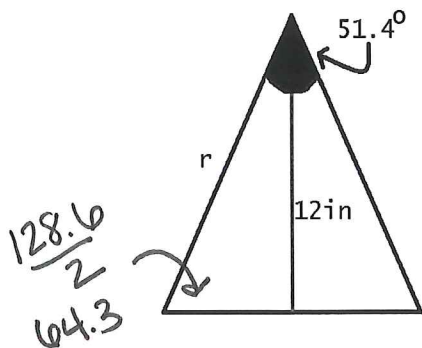


$$\sin(54) = \frac{18.7}{r}$$

$$r \sin(54) = 18.7$$

$$r \approx 23.1m$$

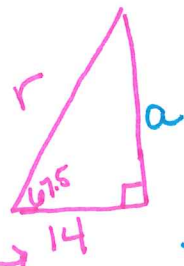
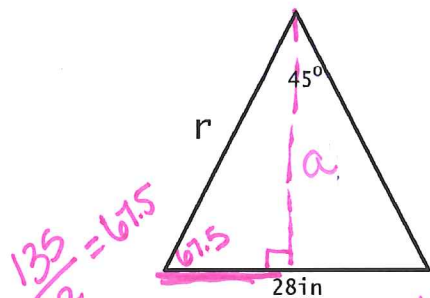
2. Find r if the triangle is isosceles.



$$\sin(64.3) = \frac{12}{r}$$

$$r = 13.3in$$

3. Find r if the triangle is isosceles.



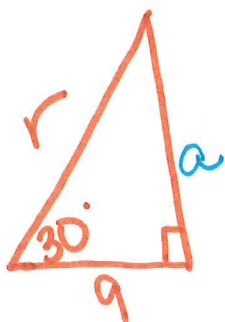
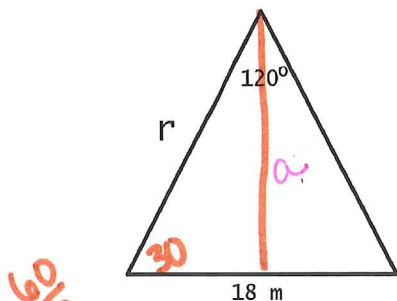
$$\cos(67.5) = \frac{14}{r}$$

$$r = 36.6in$$

$$\tan(67.5) = \frac{a}{14}$$

$$a = 33.8in$$

4. Find r if the triangle is isosceles.



$$\cos(30) = \frac{9}{r}$$

$$r = 10.4m$$

$$\tan(30) = \frac{a}{9}$$

$$a = 5.2m$$