

Name Key Date _____
 Geometry Chapter 11 Review

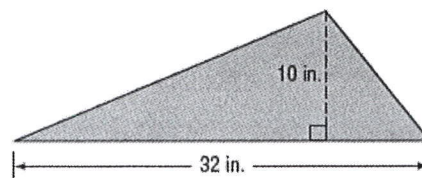
1. Find the area of the triangle.

$$A = \frac{1}{2}(32)(10)$$

$$A = 160 \text{ in}^2$$

$$h = 10$$

$$b = 32$$



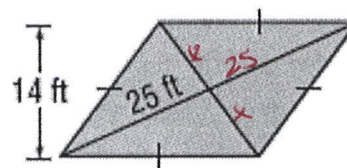
2. Find the area of the rhombus.

$$A = \frac{1}{2}(14)(50)$$

$$A = 350 \text{ ft}^2$$

$$d_1 = 14$$

$$d_2 = 2(25) = 50$$

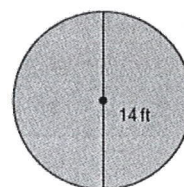


3. Find the area of the circle. Round to the nearest tenth.

$$d = 14 \quad r = 7$$

$$A = \pi(7)^2$$

$$A = 49\pi \text{ ft}^2$$



4. Find the area of the sector of the circle. Round to the nearest tenth.

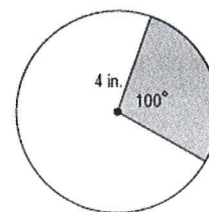
$$A = \frac{100}{360} \cdot \pi(4^2)$$

$$= \frac{5}{18} \cdot 16\pi$$

$$A = 5\pi \text{ in}^2$$

$$r = 4$$

$$\theta = 100^\circ$$



5. Find the area of the regular hexagon. Round to the nearest tenth.

$$A = \frac{1}{2}ap$$

$$= \frac{1}{2}(4\sqrt{3})(48)$$

$$A = 96\sqrt{3} \text{ cm}^2$$

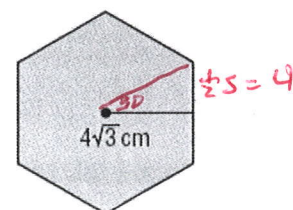
$$a = 4\sqrt{3}$$

$$\frac{1}{2}s = 4\sqrt{3} \left(\frac{\sqrt{3}}{3} \right)$$

$$2 \cdot \frac{1}{2}s = 4 \cdot 2$$

$$s = 8$$

$$P = 6(8) = 48$$



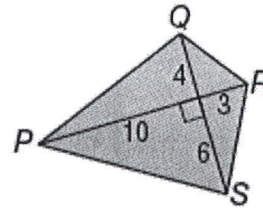
- ✧ 6. Find the area of the kite.

$$d_1 = 10 + 3 = 13$$

$$d_2 = 4 + 6 = 10$$

$$A = \frac{1}{2}(13)(10)$$

$$A = 65$$

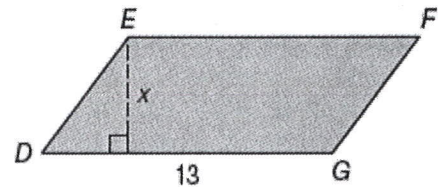


7. The area of the parallelogram DEFG is 143 square units. Find the height. Round to the nearest tenth.

$$A = 143 \quad A = bh$$

$$143 = (13)h$$

$$11 = h$$



8. The area of a circle is 314.2 square feet. What is the length of its radius?

$$A = 314.2$$

$$A = \pi r^2$$

$$\frac{314.2}{\pi} = \frac{\pi r^2}{\pi}$$

$$\sqrt{100.01} = \sqrt{r^2}$$

$$10.0 = r$$

$$r = 10 \text{ ft}$$

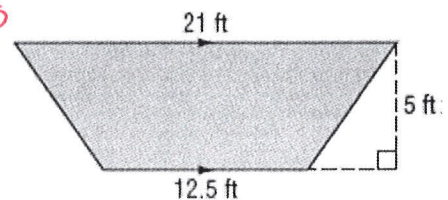
9. Find the area of the trapezoid. Round to the nearest tenth.

$$h = 5 \quad b_1 = 21 \quad b_2 = 12.5$$

$$A = \frac{1}{2}(5)(21 + 12.5)$$

$$= \frac{1}{2}(5)(33.5)$$

$$A = 83.75 \text{ ft}^2$$



- ✧ 10. If the rectangles shown at the right are similar, what is the area of the shaded rectangle? Round to the nearest tenth.

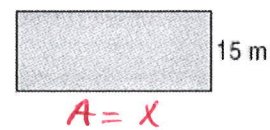
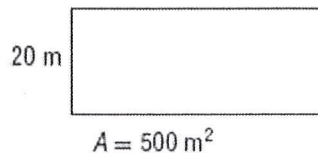
$$\frac{500}{x} = \left(\frac{20}{15}\right)^2$$

$$\frac{500}{x} = \left(\frac{4}{3}\right)^2$$

$$\frac{500}{x} = \frac{16}{9}$$

$$16x = 4500$$

$$x = 281.25$$



$$S.F. = \frac{20}{15} = \frac{4}{3}$$

$$A = 281.3 \text{ m}^2$$