

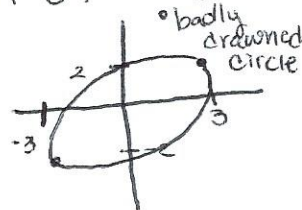
Monday 22, 2018 Oct.

web assing problems

Section 1.1

#7 write the standard form of the equation of the circle with the given points.

• endpoints of a diameter $(\underline{3}, \underline{2})$ $(\underline{-3}, \underline{-2})$



$$r = \frac{1}{2} \sqrt{(-3 - \boxed{3})^2 + (-2 - \boxed{2})^2}$$

• Fill in the missing values.

• Simplify

$$r = \frac{1}{2} \sqrt{(\boxed{-6})^2 + (-4)^2}$$

$$r = \frac{1}{2} \sqrt{\boxed{36} + 16}$$

$$r = \frac{1}{2} \sqrt{\boxed{52}}$$

• write the radicand as the product

$$r = \left(\frac{1}{2}\right)(2) \sqrt{\boxed{13}} = \sqrt{\boxed{13}}$$

P.6

#1 distance of $(4, 8)$ $(11, 8)$

$$d = |\boxed{4} - 11| = |\boxed{7}| = \boxed{7}$$

$$\#10 \quad \frac{x^2 + 5x - 24}{x^2 + 9x + 8} = \frac{(x + 8)(x - 3)}{(x + 8)(x + 1)} = \frac{(x + 8)(x - 3)}{(x + 8)(x + 1)}$$

$$\downarrow$$

$$\frac{x - 3}{x + 1}$$

$$x = -1, x = -8$$

$$x \neq -8$$

#11 Find the ratio of area shaded to area of the total figure.

$$\frac{\frac{x+5}{2} \cdot \frac{x+5}{2}}{(2x+3) \cdot (x+5)} \rightarrow \frac{x+5}{2} \cdot \frac{x+5}{2} \cdot \frac{1}{2x+3} \cdot \frac{1}{(x+5)} = \frac{x+5}{4(2x+3)}$$

P.5

$$\#20 \quad \frac{-5}{x} + \frac{11}{x^2+1} + \frac{5}{x^3+x} \rightarrow \frac{-5}{x} + \frac{11}{x^2+1} + \frac{5}{x(x^2+1)}$$

$$\frac{-5x^2 - 5 + 11x + 5}{x(x^2+1)} \leftarrow \frac{-5(x^2+1)}{x(x^2+1)} + \frac{11x}{x(x^2+1)} + \frac{5}{x(x^2+1)}$$

$$\frac{-5x^2 + 11x}{x(x^2+1)} \rightarrow \frac{x(-5x+11)}{x(x^2+1)} = \frac{-5x+11}{x^2+1}$$