

ANSWER PRESENTATION TOOL

Blue - Student Editio ▼ 7 ▼ 1 - Exercis ▼ 1-3, 9, 13-1

ALL EVEN

Show Sol

ODD

1. no; There is no integer whose square is 26.

2. no; A positive number times a positive number is a positive number, and a negative number times a negative number is a positive number.

3. $\sqrt{256}$ represents the positive square root because there is not a $-$ or a \pm in front.

9. 2 and -2

13. $\frac{1}{31}$ and $-\frac{1}{31}$

15. 2.2 and -2.2

17. -19

19. The positive and negative square roots should have been given.

$$\pm \sqrt{\frac{1}{4}} = \frac{1}{2} \text{ and } -\frac{1}{2}$$

30. >

32. <

34. yes; *Sample answer:* Consider the perfect squares, a^2 and b^2 . Their product can be written

$$\begin{aligned} \text{as } a^2b^2 &= a \cdot a \cdot b \cdot b = \\ (a \cdot b) \cdot (a \cdot b) &= (a \cdot b)^2. \end{aligned}$$

- 36. a.** The two watch faces are similar, so the ratio of their areas is equal to the square of the ratio of their corresponding radii.

$$\frac{\text{Area of small}}{\text{Area of large}} = \left(\frac{\text{radius of small}}{\text{radius of large}} \right)^2$$

$$\frac{16}{25} = \left(\frac{\text{radius of small}}{\text{radius of large}} \right)^2$$

$$\sqrt{\frac{16}{25}} = \frac{\text{radius of small}}{\text{radius of large}}$$

$$\frac{4}{5} = \frac{\text{radius of small}}{\text{radius of large}}$$

The ratio of the radius of the smaller watch face to the radius of the larger watch face is $\frac{4}{5}$.

- b.** Let r be the radius of the smaller watch face and R be the radius of the larger watch face. Solve the proportion for R .

$$\frac{4}{5} = \frac{r}{R}$$

$$\frac{4}{5} = \frac{2}{R}$$

$$R = \frac{10}{4}, \text{ or } \frac{5}{2}$$

The radius of the larger watch face is $\frac{5}{2}$ or 2.5 centimeters.

$$39. y = 3x - 2$$

$$40. y = -2x + 5$$

41. $y = \frac{3}{5}x + 1$

42. B