

Answers

5.2 Enrichment and Extension

1. 3.17 2. 6.17 3. 10.2
 4. 11.23 5. 9.11 6. 7.21
 7. 11.88 8. 12.81 9. 3.63
 10. 14.67 11. 15.78 12. 19.88

5.2 Puzzle Time

HE WAS NOT SO BRIGHT

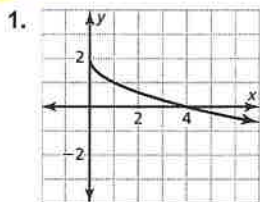
5.3 Cumulative Practice

1. $(-5, 1)$ and $(2, 8)$ 2. $(0, 3)$ and $(1, -1)$

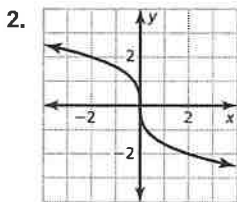
5.3 Prerequisite Skills Practice

1. vertical shrink by a factor of $\frac{1}{2}$
 2. translation 3 units up

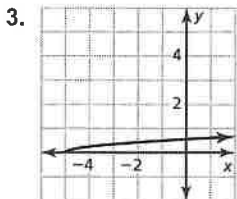
5.3 Extra Practice



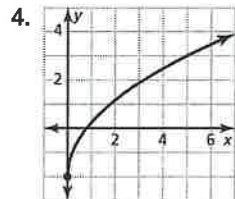
$$x \geq 0; y \leq 2$$



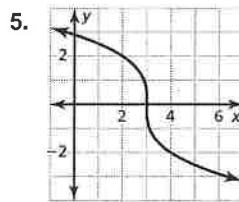
$$-\infty < x < \infty; -\infty < y < \infty$$



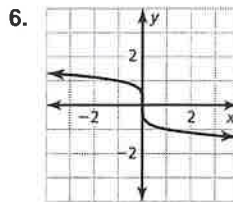
$$x \geq -5; y \geq 0$$



$$x \geq 0; y \geq -2$$

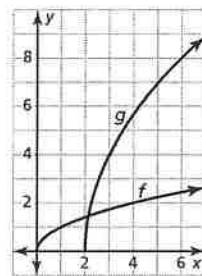


$$-\infty < x < \infty; -\infty < y < \infty$$

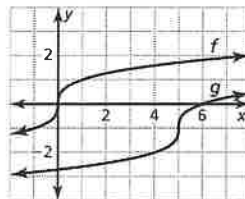


$$-\infty < x < \infty; -\infty < y < \infty$$

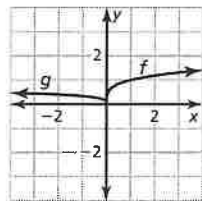
7. translation 2 units right and a vertical stretch by a factor of 4



8. translation 5 units right and 1 unit down

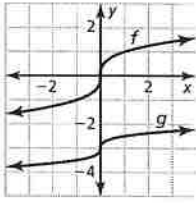


9. vertical shrink by a factor of $\frac{1}{3}$ and a reflection in the y -axis

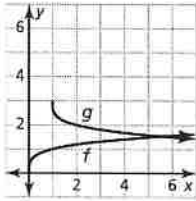


Answers

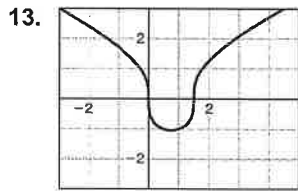
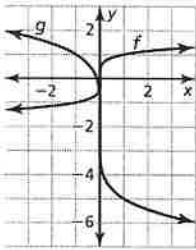
10. vertical shrink by a factor of $\frac{1}{2}$ and a translation 3 units down



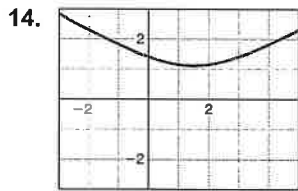
11. reflection in the x -axis and a translation 1 unit right and 3 units up



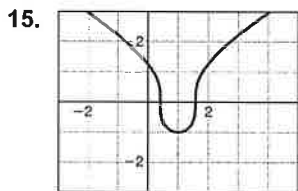
12. reflection in the y -axis, a horizontal shrink by a factor of $\frac{1}{243}$, and a translation 2 units down



$$-\infty < x < \infty; y \geq -1.04$$



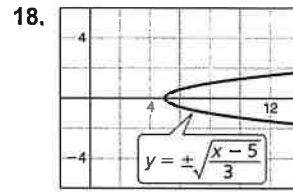
$$-\infty < x < \infty; y \geq 1.12$$



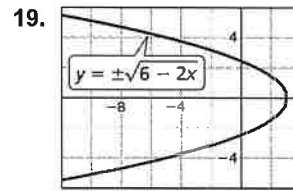
$$-\infty < x < \infty; y \geq -1$$

16. $g(x) = \sqrt{\frac{3}{2}x} + 2$

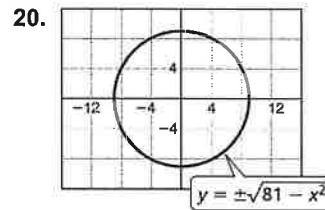
17. $g(x) = \sqrt{x-4} + \frac{1}{2}$



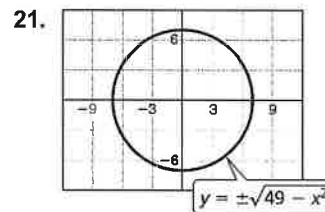
vertex: (5, 0); opens right



vertex: (3, 0); opens left

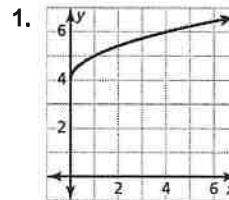


$r = 9$; x -intercepts: ± 9 ; y -intercepts: ± 9



$r = 7$; x -intercepts: ± 7 ; y -intercepts: ± 7

5.3 Reteach



$$x \geq 0; y \geq 4$$