

## Test #2 Review pp. 120-122

115.  $y = x^3$

116.  $y = \sqrt{x}$

131. a)  $x^2 + 2x + 2$

132. a)  $x^2 - 4 + \sqrt{3-x}$

b)  $x^2 - 2x + 4$

b)  $x^2 - 4 - \sqrt{3-x}$

c)  $2x^3 - x^2 + 6x - 3$

c)  $x^2\sqrt{3-x} - 4\sqrt{3-x}$

d)  $\frac{x^2 + 3}{2x - 1}, x \neq \frac{1}{2}$

d)  $\frac{x^2 - 4}{\sqrt{3-x}}, x < 3$

133. a)  $x - 8/3, (-\infty, \infty)$

134. a)  $x + 3, (-\infty, \infty)$

b)  $x - 8, (-\infty, \infty)$

b)  $\sqrt[3]{x^3 + 3}, (-\infty, \infty)$

139.  $f^{-1}(x) = x + 7$

140.  $f^{-1} = x - 5$

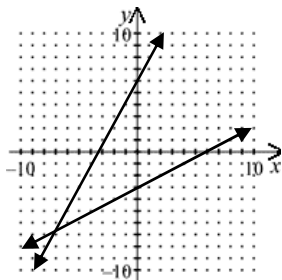
141. Yes

142. No

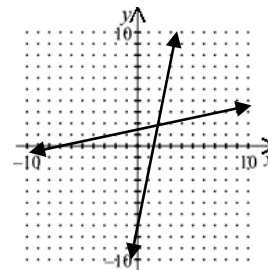
147. a)  $f^{-1}(x) = 2x + 6$

148. a)  $f^{-1}(x) = \frac{x+7}{5}$

b)



b)



c) reflections over  $y = x$

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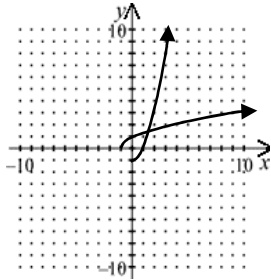
d)  $(-\infty, \infty); (-\infty, \infty)$

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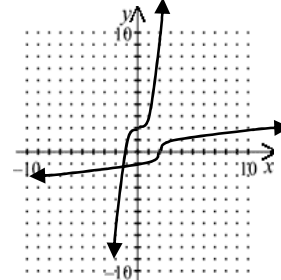
149. a)  $f^{-1}(x) = x^2 - 1, x \geq 0$

150. a)  $f^{-1}(x) = \sqrt[3]{x-2}$

b)



b)



c) reflections over  $y = x$

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d)  $[-1, \infty); [0, \infty)$

d)  $(-\infty, \infty); (-\infty, \infty)$