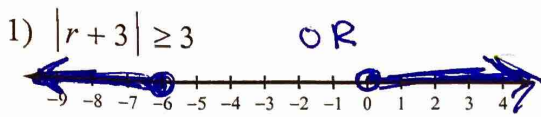


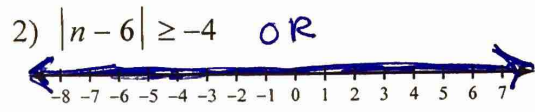
Abs Value Inequalities, Domain and Range

Solve each inequality and graph its solution. Write your answer in interval notation.



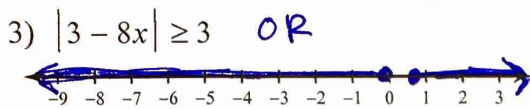
$r \geq 0$ or $r \leq -6$

$(-\infty, -6] \cup [0, \infty)$



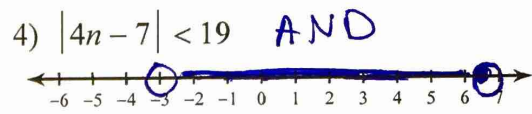
\mathbb{R}

$(-\infty, \infty)$



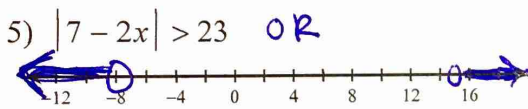
$x \leq 0$ or $x \geq 3/4$

$(-\infty, 0] \cup [3/4, \infty)$



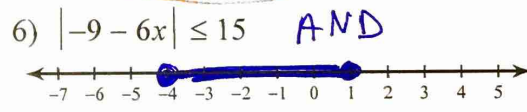
$n > -3$ and $n < 13/2$

$(-3, 13/2)$



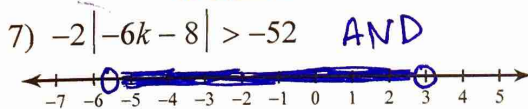
$x < -8$ or $x > 15$

$(-\infty, -8) \cup (15, \infty)$



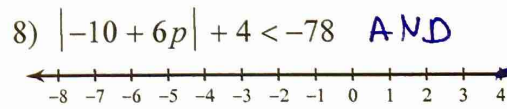
$x \geq -4$ and $x \leq 1$

$[-4, 1]$



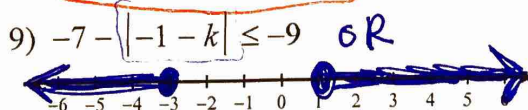
$-\frac{17}{3} < k$ and $k < 3$

$(-\frac{17}{3}, 3)$



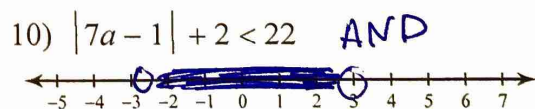
\emptyset

15.3
46/3



$k \leq -3$ or $k \geq 1$

$(-\infty, -3] \cup [1, \infty)$



$-\frac{19}{7} < a$ and $a < 3$

$(-\frac{19}{7}, 3)$

Unit 5 HW 2 pg 2

Determine the domain of each. Show any work necessary to find domain. Write your answer in interval notation.

11. $f(x) = 1 - 2x^2$

$(-\infty, \infty)$

12. $g(x) = -\sqrt{x+4}$

$[-4, \infty)$

13. $h(x) = \frac{4}{x+1}$

$(-\infty, -1) \cup (-1, \infty)$

14. $f(x) = 2x - 3$

$(-\infty, \infty)$

15. $r(x) = x^2 + 6$

$(-\infty, \infty)$

16. $y = 2\sqrt{x-3}$

$[3, \infty)$

17. $h(x) = \frac{2x}{x^2+1}$

$(-\infty, \infty)$

18. $y = x^3 - 3x + 2$

$(-\infty, \infty)$

19. $f(x) = \sqrt[3]{-x-3}$

$(-\infty, \infty)$

20. $f(x) = \frac{x+4}{x-3}$

$(-\infty, 3) \cup (3, \infty)$

21. $f(x) = |x+3|$

$(-\infty, \infty)$

22. $g(x) = -|x-1|$

$(-\infty, \infty)$