

Review for Final Exam Assignment #2

Solve each proportion. ★ CROSS-MULTIPLY

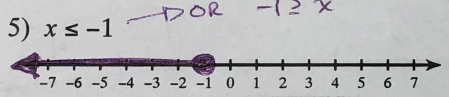
1) $\frac{10}{8} \times \frac{p}{10}$

$10 \cdot 10 = 8 \cdot p$
 $100 = 8p$
 $\div 8 \quad \div 8$
 $12.5 = p$

3) $\frac{n+2}{6} \times \frac{6}{4}$

$6 \cdot 6 = 4(n+2)$
 $36 = 4n + 8$
 $+8 \quad -8$
 $44 = 4n$
 $\div 4 \quad \div 4$
 $11 = n$

Draw a graph for each inequality.



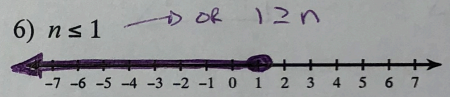
$\leq \geq$: CLOSED DOT
 $< >$: OPEN DOT

2) $\frac{2}{n} \times \frac{9}{6}$

$2 \cdot 6 = 9 \cdot n$
 $12 = 9n$
 $\div 9 \quad \div 9$
 $1.3 = n$

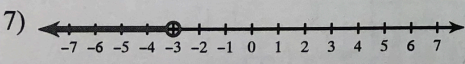
4) $\frac{5}{4} \times \frac{m+8}{8}$

$5 \cdot 8 = 4(m+8)$
 $40 = 4m + 32$
 $+32 \quad -32$
 $72 = 4m$
 $\div 4 \quad \div 4$
 $18 = m$

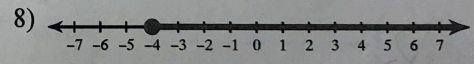


SHADE BY WHAT PART OF THE INEQUALITY SYMBOL IS CLOSEST TO THE VARIABLE.

Write an inequality for each graph.

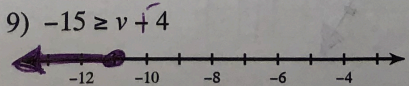


$x < -3$
 OR
 $-3 > x$

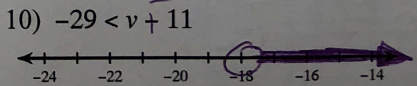


$x \geq -4$
 OR
 $-4 \leq x$

Solve each inequality and graph its solution.



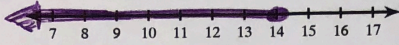
$-15 \geq v + 4$
 $+4 \quad +4$
 $-11 \geq v$
 OR
 $v \leq -11$



$-29 < v + 11$
 $+11 \quad +11$
 $-18 < v$
 OR
 $v > -18$

★ WHEN SOLVING INEQUALITIES, YOU MUST FLIP THE SIGN IF YOU MULTIPLY OR DIVIDE EACH SIDE BY A NEGATIVE

11) $-112 \leq -8n$



$-112 \leq -8n$
 $\div -8$ $\div -8$ \leftarrow FLIP THE SIGN

$14 \geq n$

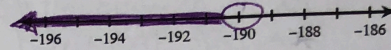
Solve each equation.

13) $|n-2| = 8$

① $n-2 = 8$
 $+2$ $+2$
 $n = 10$

② $n-2 = -8$
 $+2$ $+2$
 $n = -6$

12) $\frac{m}{19} < -10$



$\frac{m}{19} < -10$ $\times 19$

$m < -190$

14) $|n+7| = 10$

① $n+7 = 10$
 -7 -7
 $n = 3$

② $n+7 = -10$
 -7 -7
 $n = -17$

15) $|-5n| = 35$

① $-5n = 35$
 $\div -5$ $\div -5$
 $n = -7$

② $-5n = -35$
 $\div -5$ $\div -5$
 $n = 7$

16) $\left|\frac{r}{4}\right| = 1$

① $\frac{r}{4} = 1$ $\times 4$
 $r = 4$

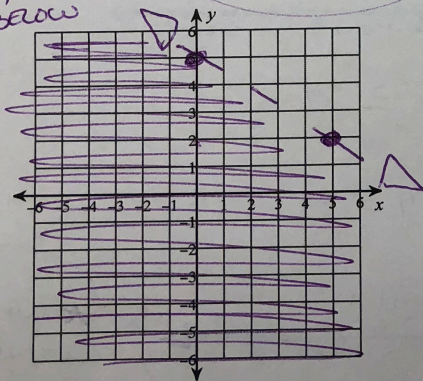
② $\frac{r}{4} = -1$ $\times 4$
 $r = -4$

Sketch the graph of each linear inequality.

17) $y < -\frac{3}{5}x + 5$

DOTTED,
SHADE BELOW

y -INT = 5
 SLOPE = $-\frac{3}{5}$



18) $y \geq -2x + 3$

SOLID,
SHADE ABOVE

y -INT = -3
 SLOPE = -2 = $\frac{-2}{1}$

