

Find the value of the variable that makes each of the statements true.

1. $\frac{4}{x^2} = \frac{1}{9}$

2. $\frac{2t}{t-2} = \frac{t+4}{t-2}$

1.

2.

3. $\frac{b+2}{b-3} = \frac{3b-4}{b-3}$

4. $\frac{w^2}{w-4} - \frac{8}{w-4} = \frac{2w}{w-4}$

3.

4.

5. $\frac{5}{x-4} = \frac{3}{x}$

6. $\frac{p^2}{p+2} = \frac{4p+12}{p+2}$

5.

6.

Find the value of the variable that makes each of the statements true.

7. $\frac{4a^2-9}{2a-3} = 9$

8. $\frac{x^2-3x+4}{x-4} = -4$

7.

8.

9. $\frac{2}{3x^2} = \frac{1}{x} - \frac{1}{3}$

10. $\frac{x}{x-4} = \frac{x+10}{x-2}$

9.

10.

11. $\frac{p-1}{p+3} - \frac{2}{p-3} = \frac{7-3p}{p^2-9}$

12. $\frac{x}{x-2} + \frac{2}{x+3} = \frac{3x+4}{x^2+x-6}$

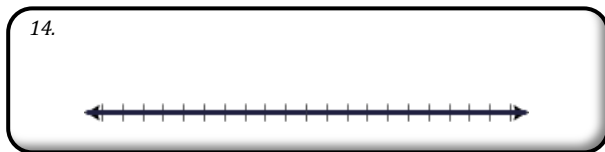
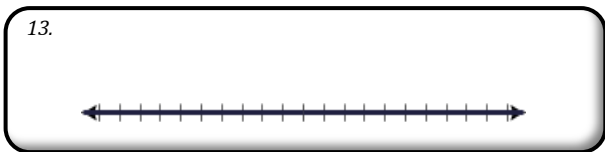
11.

12.

Find the set of values of the variable that makes each of the inequality statements true.

$$13. \frac{3a}{a-1} \leq 4$$

$$14. \frac{m-3}{m+2} \geq 0$$



$$15. \frac{y}{y+2} < 3$$

$$16. \frac{3}{x-2} \geq \frac{1}{x+2}$$

