

Routine Simplify Practice #3

Fully simplify the following expressions:

1. $bc \times 3bc$

2. $y \div \frac{1}{2}$

3. $2k \div 10kh$

4. $5x^2 \times 2y \times 3xy^2$

5. $(5x^2)^2$

6. $-2kh - 4kh$

7. $16x^2 \div 12x$

8. $-3g^2h \times 5h$

9. $16 \div 4y$

10. $4x - 12x$

11. $k^2 \times 7k^3$

12. $1.2y + 3.5y$

13. $4yx \div x^2$

14. $(0.5h)^2$

15. $9k \times 2x \times 2y$

16. $(x^3)^5$

17. $y \times 0.87y^2$

18. $xy \div xy^2$

19. $4x - 22x$

20. $3x - 5x + 6x$

Answers: Routine Simplify Practice #3

Fully simplify the following expressions:

1. $bc \times 3bc = 3b^2c^2$
2. $y \div \frac{1}{2} = y \times \frac{2}{1} = 2y$
3. $2k \div 10kh = \frac{2}{10} \frac{k}{hk} = \frac{1}{5h}$ or $\frac{1}{5}h^{-1}$
4. $5x^2 \times 2y \times 3xy^2 = 30x^3y^3$
5. $(5x^2)^2 = 5x^2 \times 5x^2 = 25x^4$
6. $-2kh - 4kh = -6kh$
7. $16x^2 \div 12x = \frac{16}{12} \frac{x^2}{x} = \frac{4x}{3}$ or $\frac{4}{3}x$
8. $-3g^2h \times 5h = -15g^2h^2$
9. $16 \div 4y = \frac{4}{y}$ or $4y^{-1}$
10. $4x - 12x = -8x$
11. $k^2 \times 7k^3 = 7k^5$
12. $1.2y + 3.5y = 4.7y$
13. $4yx \div x^2 = \frac{4xy}{x^2} = \frac{4y}{x}$ or $4x^{-1}y$ or $4yx^{-1}$
14. $(0.5h)^2 = 0.5h \times 0.5h = 0.25h^2$
15. $9k \times 2x \times 2y = 36kxy$
16. $(x^3)^5 = x^3 \times x^3 \times x^3 \times x^3 \times x^3 = x^{15}$
17. $y \times 0.87y^2 = 0.87y^3$
18. $xy \div xy^2 = \frac{xy}{x^2y} = \frac{1}{x}$ or x^{-1}
19. $4x - 22x = -18x$
20. $3x - 5x + 6x = 3x + 6x - 5x = 4x$