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. $xy \div x^2y$

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. $y \div ½$ $= y \times \frac{2}{1}$ $= 2y$

3. $2k \div 10kh$ $= \frac{2 \quad k}{10 \ h \ k \ h}$ $= \frac{1}{hh\,5\,h}$ or 📄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. $16x^2 \div 12x$ $= \frac{16 \ x^2}{12 \ x}$ $= \frac{4x}{3}$ or 🙂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. $4yx \div x^2$ $= \frac{4 \ x \ y}{x^2}$ $= \frac{4y}{x}$ or $4x^{-1}y$ or $4y\,x^{-1}$

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. $xy \div x^2y$ $= \frac{x \ y}{x^2 \ y}$ $= \frac{1}{x}$ or x^{-1}

19. $4x - 22x$ $= {}^-18x$

20. $3x - 5x + 6x$ $= 3x + 6x - 5x$ $= 4x$