

11-29-17

Aim: SWBAT factor an expression to look like the Distributive Property.

HW: WS

Test Friday

Do Now: Find the GCF.

1. $5x$ and $35xy$ 2. $2xyz$ and $16x^2$ 3. 25 and $75x$

$5x$

$2x$

25

Factor each expression. If the expression cannot be factored, write cannot be factored. When you factor an expression, your final answer should look like the Distributive Property.

5) $15a + 25b$

6) $9x - 27xy$

7) $24y + 16$

8) $13x - 9y$

9) $25x - 100$

$25(x - 4)$
 \uparrow
 GCF

10) $8x + 12$ $8\sqrt{12} \times$
 $4(2x + 3)$
 \uparrow
 GCF

11) $18xy + 6y$

12) $4ab + 12a - 10$

$2\left(\frac{4ab}{2} + \frac{12a}{2} - \frac{10}{2}\right)$
 \uparrow
 GCF $2(2ab + 6a - 5)$

13) $-6x + 12$

$6\sqrt{12}$
 $6\left(-\frac{6x}{6} + \frac{12}{6}\right)$
 $6(-x + 2)$

14) $7x - 15y$ $7\sqrt{15} \times$
 $1\sqrt{15}$
 cannot be factored

15) $-9x + 24$

16) $6xy + 13xz$
 $x\left(\frac{6xy}{x} + \frac{13xz}{x}\right)$
 $x(6y + 13z)$
 $6\sqrt{13} \times$
 $3\sqrt{13} \times$
 $2\sqrt{13} \times$
 $1\sqrt{13} \times$

17) $15a - 12$

18) $x - 8x$

19) $15a - 20b + 10c$

20) $12ab + 18ac$

21) $36x + 24$

$12(3x + 2)$

22) $4x + 9$

cannot be factored

23) $14x - 16y$

$2(7x - 8y)$

24) $18c - 30cd$

$6c(3 - 5d)$

HOMEWORK - FACTORING

Find the *GCF* of each pair of terms.

1) n and $5n$

2) $12c$ and $24d$

3) $2a$ and 8

4) $14x$ and $21xy$

FACTOR each expression. If the expression cannot be factored, write cannot be factored. When you factor an expression, your final answer should look like the Distributive Property.

5) $n + 5n$

6) $12c - 24d$

7) $2a + 8$

8) $14x - 21xy$

9) $3a + 9ab$

10) $6d - 9cd$

11) $12x + 25y$

12) $24x + 30xy$

13) $30 + 42y$

14) $40x - 60$

15) $100xy + 75xyz$

16) $4x - 7$

SIMPLIFY each expression using the Distributive Property.

17) $3(-4x + 8)$

18) $\frac{1}{2}(6x + 14)$

19) $-4(4x - 5)$

20) $\frac{3}{5}(15x - 45)$