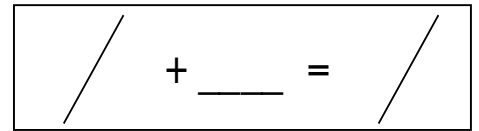


Name _____ Period _____



3-5 More Practice with Factoring

Find the greatest common factor (GCF).

- | | | | |
|---------------|-------------|------------------|-------------|
| 1. ym, mg | GCF = _____ | 6. 12m, 16mh | GCF = _____ |
| 2. jkm, k, kg | GCF = _____ | 7. 9gk, 12k | GCF = _____ |
| 3. rw, hrw | GCF = _____ | 8. 13y, 39y | GCF = _____ |
| 4. kda, da, a | GCF = _____ | 9. 11hm, 44m, 33 | GCF = _____ |
| 5. mn, nw | GCF = _____ | 10. 8hp, 16hp | GCF = _____ |

Factor the expressions completely.

- | | | | |
|------------------|------------------|-------------------------|------------------|
| 11. $16hy + 30y$ | What is the GCF? | 12. $21x - 14xn - 42xk$ | What is the GCF? |
| _____ | | _____ | |
| 13. $15n - 30y$ | What is the GCF? | 14. $5h - 12hk$ | What is the GCF? |
| _____ | | _____ | |
| 15. $40hf - 8hf$ | What is the GCF? | 16. $hn - 7hn + 35hn$ | What is the GCF? |
| _____ | | _____ | |

17. Which of the following expressions cannot be factored?

- a. $18mn - 13mn$
- b. $15mn - 30$
- c. $12mn - 11$
- d. $24mn - 30n$

18. Which of the following has a GCF of $8n$?

- a. $32n, 14$
- b. $4n, 2n$
- c. $24n, 8$
- d. $16n, 24n$

19. Find the error. Emily factored the following expression $18h - 12gh$.

Her answer is $6(2h - 3gh)$

Her answer is NOT the correct answer.

Explain why this answer is wrong AND correctly solve the problem.

Factor the expressions completely.

20. $35hg + 25hg$

21. $12x - 16xf$

22. $300m - 50mh - 200m$

23. $60h + 15g$

24. $42v + 7vx + 21x$

25. $24kf - 9kf$

Use the distributive property to simplify each of the following expressions.

26. $5(4y - 3)$

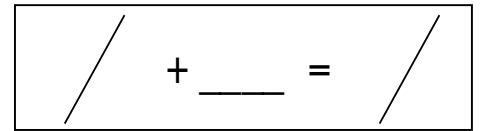
27. $-11(2m + 4y)$

28. $6(g - 5)$

29. $-(4k + 3y)$

30. $8(y - 11h)$

Name KEY Period _____



3-5 More Practice with Factoring

Find the greatest common factor (GCF).

1. ym, mg GCF = **m** 6. $12m, 16mh$ GCF = **4m**
2. jkm, k, kg GCF = **k** 7. $9gk, 12k$ GCF = **3k**
3. rw, hrw GCF = **rw** 8. $13y, 39y$ GCF = **13y**
4. kda, da, a GCF = **a** 9. $11hm, 44m, 33$ GCF = **11**
5. mn, nw GCF = **n** 10. $8hp, 16hp$ GCF = **8hp**

Factor the expressions completely.

11. $16hy + 30y$ What is the GCF?
2y
 $2y(8h + 15)$
12. $21x - 14xn - 42xk$ What is the GCF?
7x
 $7x(3 - 2n - 6k)$
13. $15n - 30y$ What is the GCF?
15
 $15(n - 2y)$
14. $5h - 12hk$ What is the GCF?
h
 $h(5 - 12k)$
15. $40hf - 8hf$ What is the GCF?
8hf
 $8hf(5 - 1)$
16. $hn - 7hn + 35hn$ What is the GCF?
hn
 $hn(1 - 7 + 35)$

17. Which of the following expressions cannot be factored?

- a. $18mn - 13mn$
- b. $15mn - 30$
- c. $12mn - 11$
- d. $24mn - 30n$

18. Which of the following has a GCF of $8n$?

- a. $32n, 14$
- b. $4n, 2n$
- c. $24n, 8$
- d. $16n, 24n$

19. Find the error. Emily factored the following expression $18h - 12gh$.

Her answer is $6(2h - 3gh)$

Her answer is NOT the correct answer.

Explain why this answer is wrong AND correctly solve the problem.

Emily didn't factor out the "h" that is in common with both the terms in the parenthesis.

$6h(2 - 3g)$ is the correct factoring.

Factor the expressions completely.

20. $35hg + 25hg$
 $5hg(7 + 5)$

21. $12x - 16xf$
 $4x(3 - 6f)$

22. $300m - 50mh - 200m$
 $50m(6 - h - 4)$

23. $60h + 15g$
 $15(4h + g)$

24. $42v + 7vx + 21x$
 $7(6v + vx + 3x)$

25. $24kf - 9kf$
 $3kf(8 - 3)$

Use the distributive property to simplify each of the following expressions.

26. $5(4y - 3)$
 $20y - 15$

27. $-11(2m + 4y)$
 $-22m - 44y$
Or $-22m + -44y$

28. $6(g - 5)$
 $6g - 30$

29. $-(4k + 3y)$
 $-4k - 3y$
 $-4k + -3y$

30. $8(y - 11h)$
 $8y - 88h$