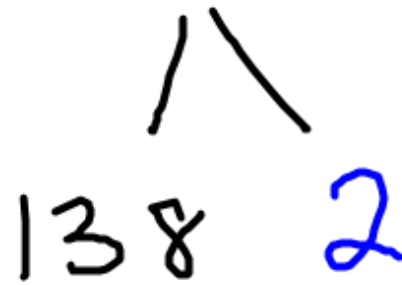


factor

235



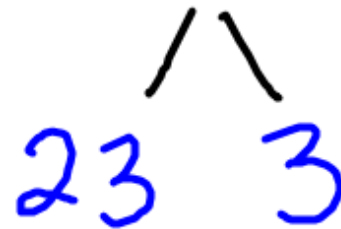
276



138 2 46 6

69 2

69 4



23 12

factor

$$5x^2 + 15x - 25x^3$$

$$5x(x + 3 - 5x^2)$$

$$5x^2 + 15x - 25x^3$$

factor

$$4x^2 - 4x - 35$$

$$-4x = -14x + 10x$$

$$-140x^2 = -14 \cdot 10$$

140

^

14

10

^

^

7 2

5 2

$$4x^2 - 14x \quad + \quad 10x - 35$$

-14

10

$$2x(2x-7) \quad + \quad 5(2x-7)$$

$$(2x-7)(2x+5)$$

factor

$$x^2 - 49$$

$$0x = -7x + 7x$$

$$-49x^2 = -7x \cdot 7x$$

$$\begin{array}{l} x^2 - 7x \quad | \quad +7x - 49 \\ x(x-7) \quad | \quad +7(x-7) \\ \hline (x-7) \quad | \quad (x+7) \end{array}$$

$$\begin{array}{c} 49 \\ \wedge \\ 7 \quad 7 \end{array}$$

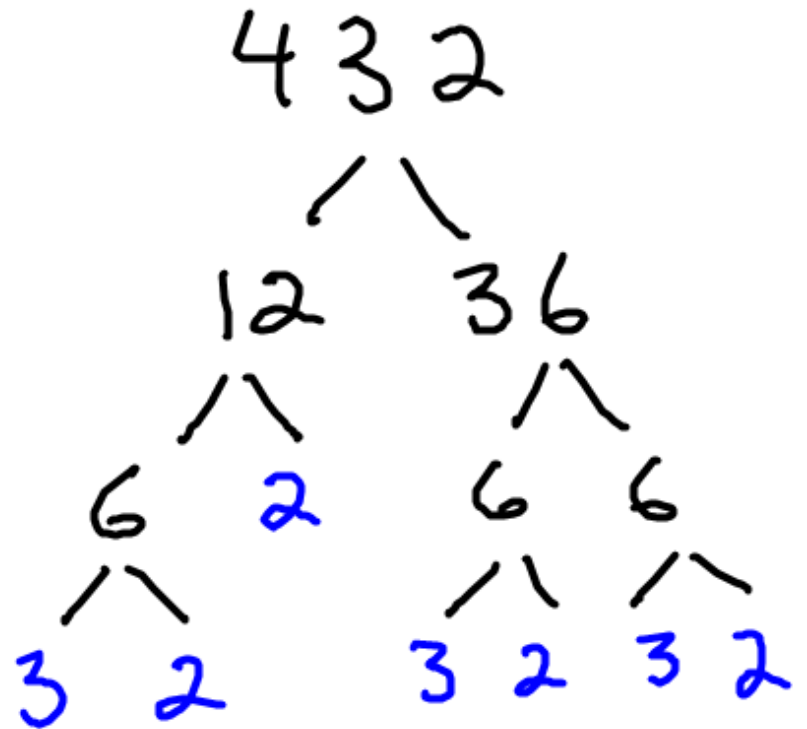
$$\begin{array}{c} 2 \\ 3 \\ 5 \\ 10 \\ 7 \end{array}$$

factor

$$10x^2 - 3x = -2x^2 + 36$$
$$2x^2 - 36 \quad +2x^2 - 36$$

$$12x^2 - 3x - 36 = 0$$

$$-3x = +$$
$$-432x^2 = \bullet$$



$$12) \quad 3x^2 + 11x - 4$$

$$3x^2 - 1x \quad + 12x - 4$$

$$x(3x - 1) \quad + 4(3x - 1)$$

$$(3x - 1)(x + 4)$$

$$\begin{array}{r} -1 \quad + 12 = 11 \\ -1 \quad \cdot 12 = 12 \end{array}$$

$$20) 3x^2 + 15x - 42$$

$$3(x^2 + 5x - 14)$$

$$7 - 2 = 5$$

$$3(x+7)(x-2)$$

$$(3x+21)(x-2)$$

$$3(x^2 + 7x - 2x - 14)$$

pg. 945-946
Homework
#10-21 all, #30-37 all
If no school #22-29 all

Factor the trinomial. If the trinomial cannot be factored, say so. (Lesson 5.2)

10. $x^2 + 8x + 15$

11. $m^2 - 9m + 20$

12. $3x^2 + 11x - 4$

13. $6x^2 + 5x - 6$

14. $9a^2 - 56a + 12$

15. $4u^2 - 4u - 35$

16. $n^2 - 49$

17. $x^2 - 10x + 25$

18. $16m^2 - 24m + 9$

19. $4x^2 - 2x - 20$

20. $3p^2 + 15p - 42$

21. $6x^2 + 13x - 25$

Solve the equation. (Lesson 5.2)

22. $x^2 + 10x + 21 = 0$

23. $2x^2 - 13x - 7 = 0$

24. $3x^2 - 24x - 27 = 0$

25. $25m^2 - 20m + 4 = 0$

26. $x^2 - 8x = -15$

27. $8k^2 + 5k = 2k^2 + 4$

28. $10x^2 - 3x = -2x^2 + 36$

29. $2(q^2 - 20) + 17q = -10q^2$

Write the quadratic function in intercept form and give the function's zeros.

(Lesson 5.2)

30. $y = x^2 + 10x + 9$

31. $y = x^2 - 5x$

32. $y = 2x^2 + 3x - 2$

33. $y = 6x^2 - 24$

34. $y = 4x^2 - 12x + 8$

35. $y = 5x^2 - 13x + 6$

36. $y = 4x^2 + 22x + 24$

37. $y = 7x^2 - 63$