

Any questions from last day's homework?

pp. 253-255 #3bdfh, 6, 7, 8, 9bdf, 10, 11a, 13, 14

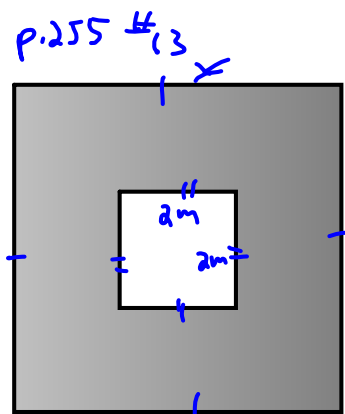
Collect homework from Nov. 8

Today's Learning Goal(s):

By the end of the class, I will be able to:

a) factor more difficult polynomials by first finding **common factors**.

Be ready for SWYK 5.2 tomorrow!



$$\begin{aligned} a) A_{\text{gray (wet)}} &= A_{\text{Total}} - A_{\text{white}} \\ &= (x)(x) - (2)(2) \\ &= x^2 - 4 \end{aligned}$$

$$b) \text{Tile Cost} = \$50/\text{m}^2$$

$$\text{if } x = 10$$

$$\begin{aligned} A_{\text{net}} &= x^2 - 4 \\ &= (10)^2 - 4 \\ &= 100 - 4 \\ &= 96 \end{aligned}$$

$$\begin{aligned} \text{Cost} &= 50 \times 96 \\ &= \$4800 \end{aligned}$$

$$\#14$$

$$\begin{aligned} \text{L} &= \\ A &= x^2 + 7x + 10 \quad \text{W} \end{aligned}$$

$$\begin{aligned} A &= x^2 + 7x + 10 \\ &= (x + 5)(x + 2) \end{aligned}$$

\uparrow \uparrow
L W

$$\text{if } A = 40$$

$$\begin{array}{r} 40 \\ 1 \quad 40 \\ 2 \quad 20 \\ 3 \quad 10 \\ 4 \quad 5 \\ 5 \quad 8 \end{array} \quad x = 3$$

$$\boxed{A = 14}$$

MBF 3CI 5.4 Factoring Trinomials of the form $ax^2 + bx + c$ Date: Nov. 15/16

Review from yesterday's lesson:

1. Factor the following:

	$c=0$		$b=0$	
a) $x^2 + 7x$	b) $x^2 - 2.8x + 0$	c) $x^2 - 49$	d) $y^2 - 121$	
$= x(x+7)$	$= (x+0)(x-2.8)$	$= x^2 + 0x - 49$	$= (y+11)(y-11)$	
	$= x(x-2.8)$	$= (x-7)(x+7)$		

Today we are combining the types of factoring.

Remember: Always **look for common factoring first**

Ex.1 Factor the following completely.

a) $2x^2 + 18x + 40$	b) $3x^2 - 12$	c) $3x^2 - 39x + 90$
$= 2(x^2 + 9x + 20)$	$= 3(x^2 - 4)$	$= 3(x^2 - 13x + 30)$
$= 2(x+4)(x+5)$	$= 3(x+2)(x-2)$	$= 3(x-3)(x-10)$

$$\begin{array}{lll}
 \text{d) } -2x^2 + 50 & \text{e) } -x^2 + 18x + 40 & \text{f) } 9.3y^2 - 46.5y \\
 = -2(x^2 - 25) & = -1(x^2 - 18x - 40) & = 9.3y(y - 5) \\
 = -2(x - 5)(x + 5) & = -1(x - 20)(x + 2) &
 \end{array}$$

$$\begin{array}{lll}
 \text{g) } -2x^2 + 16x - 30 & \text{h) } 1.3x^2 + 3.9x - 5.2 & \text{i) } S.A._{\text{Cylinder}} = \underline{2\pi r^2} + \underline{2\pi r h} \\
 = -2(x^2 - 8x + 15) & = 1.3(x^2 + 3x - 4) & = 2\pi r(r + h) \\
 = -2(x - 3)(x - 5) & = 1.3(x + 4)(x - 1) &
 \end{array}$$

Entertainment: pp. 259-263 do not “expand to check” – just use the back of the book to check
 #1ace, 2ace, 3a, 4ace, 5ace, 6, 11
 Challenge: #15, 16

Exit Card

Check each student's 1c, 2c and 5c before they leave.

Be ready for SWYK 5.2 tomorrow!