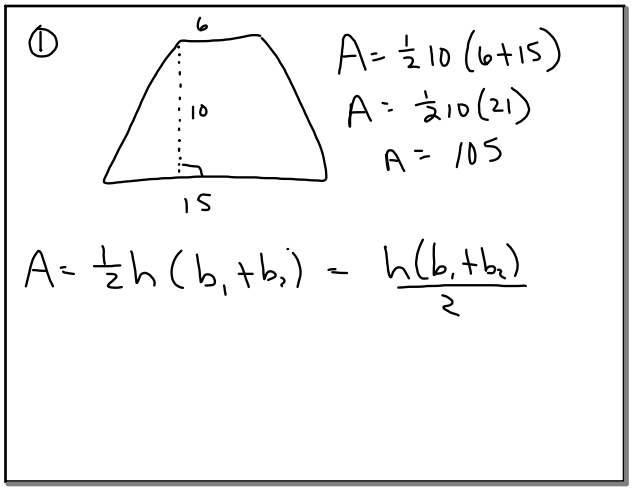
11.2 page 141 in workbook

1. 105 m^2
2. 84 mm^2
3. 123.75 in^2
4. 80 ft^2
5. 32 m^2
6. 442.75 cm^2
7. 13 cm
8. 6m; 24 m
9. 18 m

11.2 page 142 workbook

1. 117.5m^2
2. 187 cm^2
3. 39.36 in^2
4. 112 ft^2
5. 102 ft^2
6. 20 cm^2
7. 7 cm
8. 20m; 40 m
9. 105 in
10. a) 6.75 in
    b) 4.5 in, 3 in

Apr 2-7:12 AM



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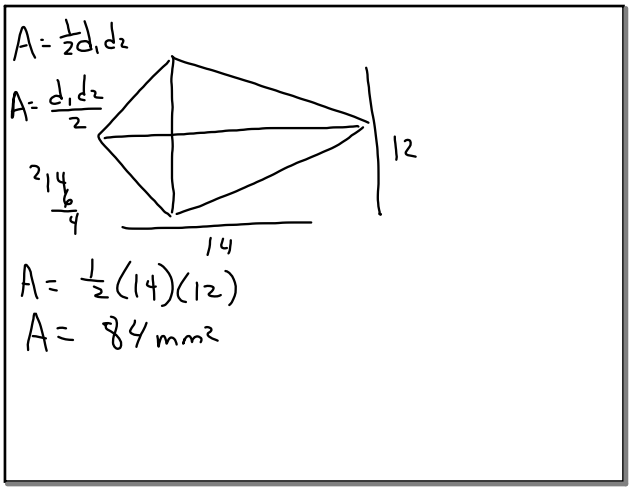
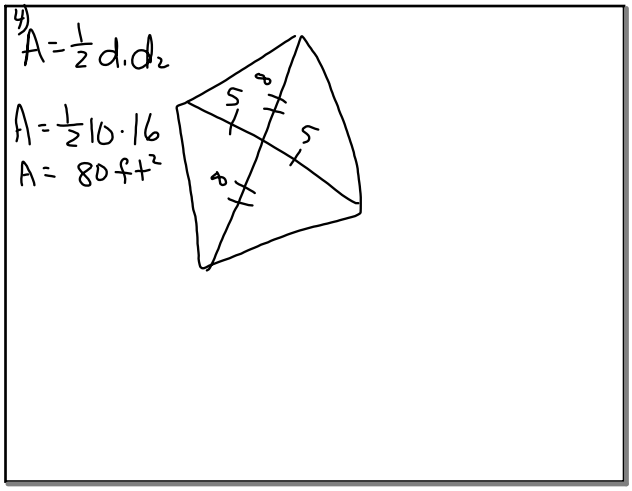


Apr 2-10:32 AM



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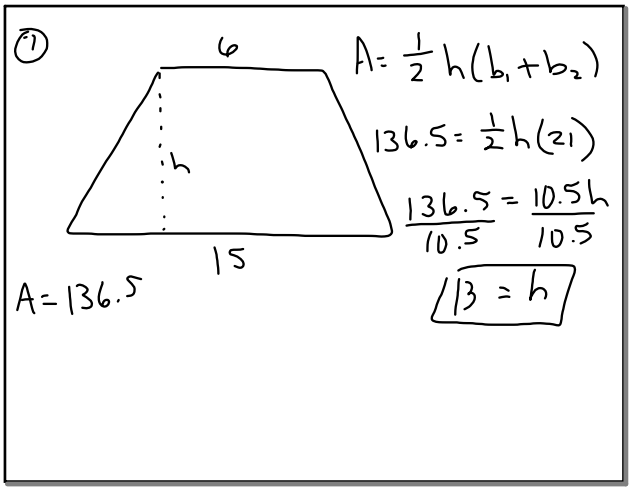
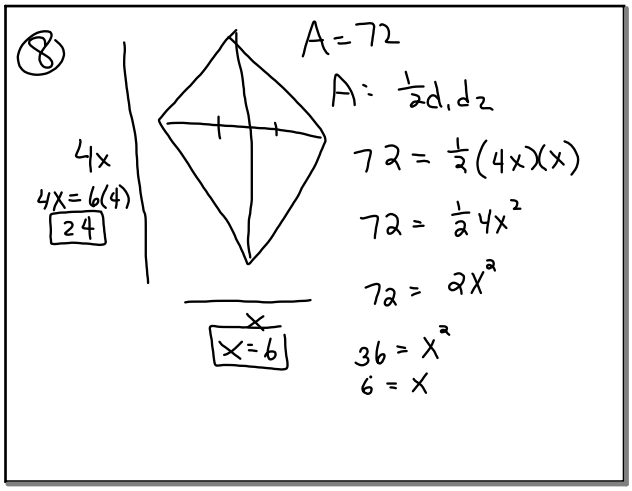
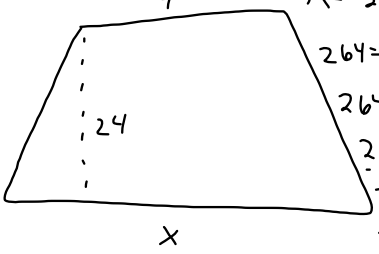


Apr 2-10:35 AM



Apr 2-10:37 AM

A=264 ⑨



$A = \frac{1}{2}h(b_1 + b_2)$

$264 = \frac{1}{2}(24)(4+x)$

$264 = 12(4+x)$

$264 = 48 + 12x$

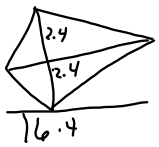
$-48 \quad -48$

$\frac{216}{12} = \frac{12x}{12}$

$18 = x$

Apr 2-10:39 AM

③ P 42



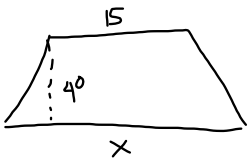
$A = \frac{1}{2}d_1 d_2$

$A = \frac{1}{2}(16.4)(4.8)$

$A = 39.4$

Apr 2-10:40 AM

A=2400



$A = \frac{1}{2}h(b_1 + b_2)$

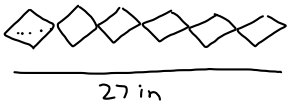
$2400 = \frac{1}{2}(40)(15+x)$

$\frac{2400}{20} = \frac{20(15+x)}{20}$

$120 = 15 + x$

$105 = x$

Apr 2-10:42 AM



$A = 108\ in^2$

16 Rhombi

$a = 108 \div 16 = 6.75\ in^2$

$b = 27 \div 6 = 4.5$ length of horizontal diagonal

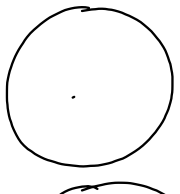
$A = \frac{1}{2}d_1 d_2$

$6.75 = \frac{1}{2}(4.5)d$

$\frac{6.75}{2.25} = \frac{2.25d}{2.25}$

$3 = d$ Vertical diagonal of each Rhombus

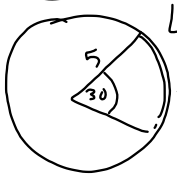
Apr 2-10:44 AM



$C = 2\pi r$

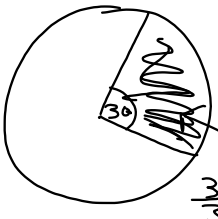
$d\pi$

Length of arc



$\frac{30}{360} \cdot 2\pi r$

Apr 2-10:47 AM



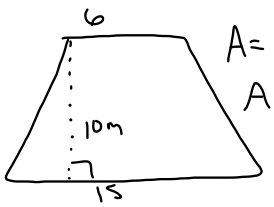
$A = \pi r^2$

sector

$\frac{30}{360} \cdot \pi r^2$

Apr 2-10:48 AM

p141
①



$A = \frac{1}{2}h(b_1+b_2)$

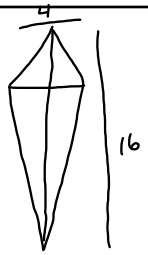
$A = \frac{1}{2}\cdot 10(6+15)$

$A = 5(21)$

$A = 105\ m^2$

Apr 2-8:39 AM

⑤

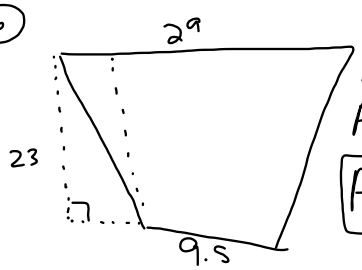


$A = \frac{1}{2}d_1d_2$

$A = \frac{1}{2}(4)(16)$

Apr 2-8:41 AM

⑥



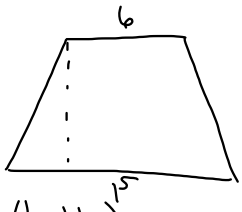
$A = \frac{1}{2}h(b_1+b_2)$

$A = \frac{1}{2}\cdot 23(29+9.5)$

$A = 442.75\ cm^2$

Apr 2-8:42 AM

$A = 136.5$



$A = \frac{1}{2}h(b_1+b_2)$

$136.5 = \frac{1}{2}h(6+15)$

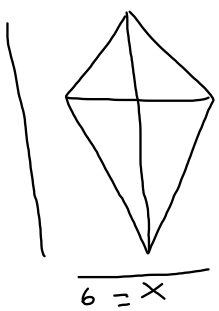
$136.5 = \frac{1}{2}h(21)$

$\frac{136.5}{10.5} = \frac{10.5h}{10.5}$

$13 = h$

Apr 2-8:43 AM

$A = 72$



$A = \frac{1}{2}d_1d_2$

$72 = \frac{1}{2}\cdot 4x\cdot x$

$72 = \frac{1}{2}\cdot 4x^2$

$\frac{72}{2} = \frac{2x^2}{2}$

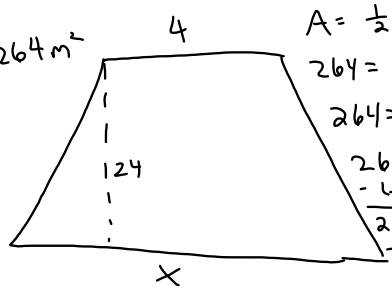
$36 = x^2$

$6 = x$

Apr 2-8:46 AM

⑨

$A = 264\ m^2$



$A = \frac{1}{2}h(b_1+b_2)$

$264 = \frac{1}{2}(24)(4+x)$

$264 = 12(4+x)$

$264 = 48+12x$

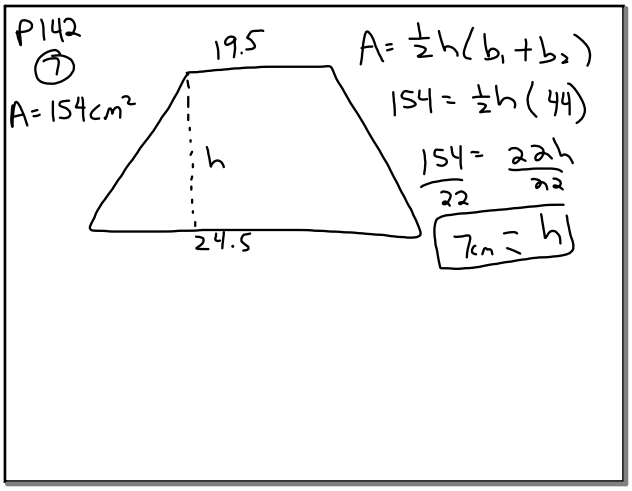
$-48 \quad -48$

$\frac{216}{12} = \frac{12x}{12}$

$18_m = x$

Apr 2-8:47 AM

P142 (7)



$A = \frac{1}{2}h(b_1 + b_2)$

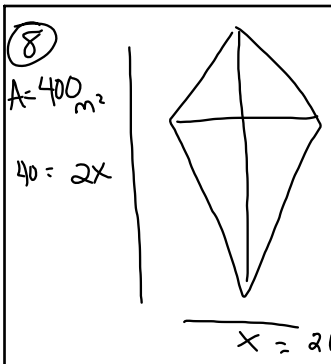
$154 = \frac{1}{2}h(44)$

$\frac{154}{22} = \frac{22h}{22}$

$7 = h$

Apr 2-8:49 AM

(8)



$A = \frac{1}{2}d_1d_2$

$400 = \frac{1}{2}(2x)(x)$

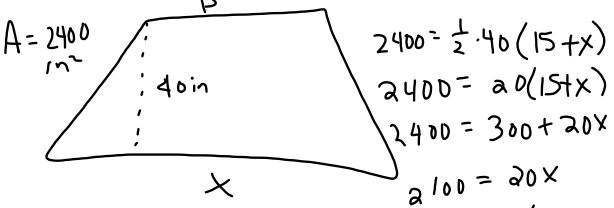
$400 = \frac{1}{2}2x^2$

$400 = x^2$

$20 = x$

Apr 2-8:51 AM

(9)



$A = \frac{1}{2}h(b_1 + b_2)$

$2400 = \frac{1}{2} \cdot 40(15 + x)$

$2400 = 20(15 + x)$

$2400 = 300 + 20x$

$2100 = 20x$

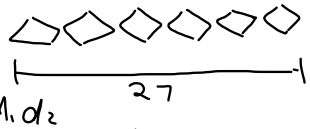
$105 = x$

Apr 2-8:52 AM

(10) 27 in

108 in² area

a) $108 \div 16 =$ 6.75 in² each Rhombus

b) 

$27 \div 6 =$ 4.5 in

$A = \frac{1}{2}d_1d_2$

$6.75 = \frac{1}{2}(4.5)x$

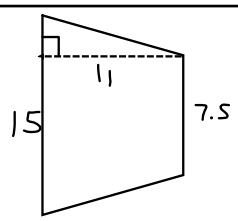
$6.75 = 2.25x$

$3 = x$

Apr 2-8:53 AM

(3)

$A = \frac{1}{2}h(b_1 + b_2)$ or $\frac{h(b_1 + b_2)}{2}$



$A = \frac{11(15 + 7.5)}{2}$

$A = 123.75 \text{ in}^2$

Apr 2-7:50 AM

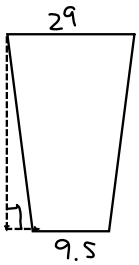
(6)

$A = \frac{1}{2}h(b_1 + b_2)$

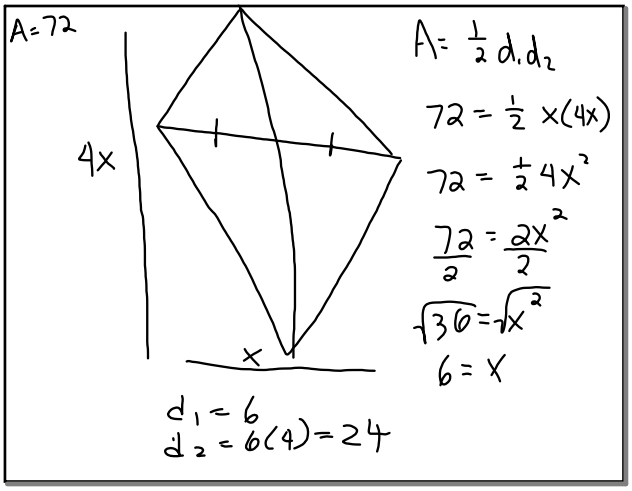
$A = \frac{h(b_1 + b_2)}{2}$

$A = \frac{23(29 + 9.5)}{2}$ 23

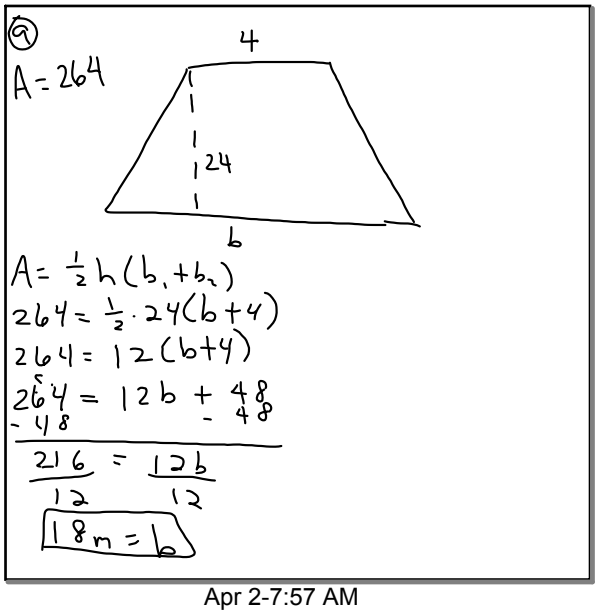
$A = 442.75 \text{ m}^2$



Apr 2-7:53 AM



Apr 2-7:55 AM



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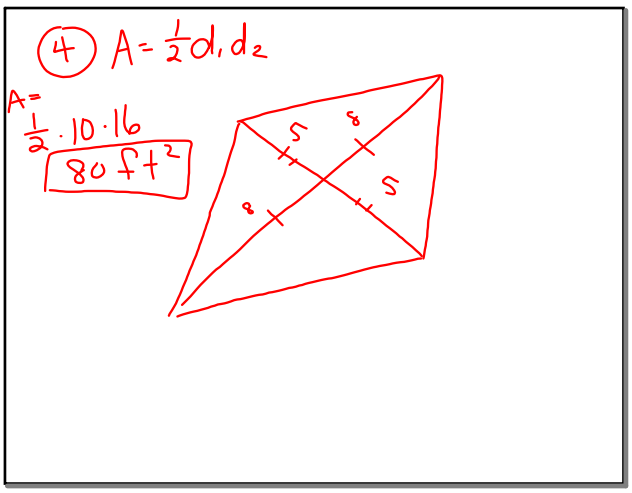
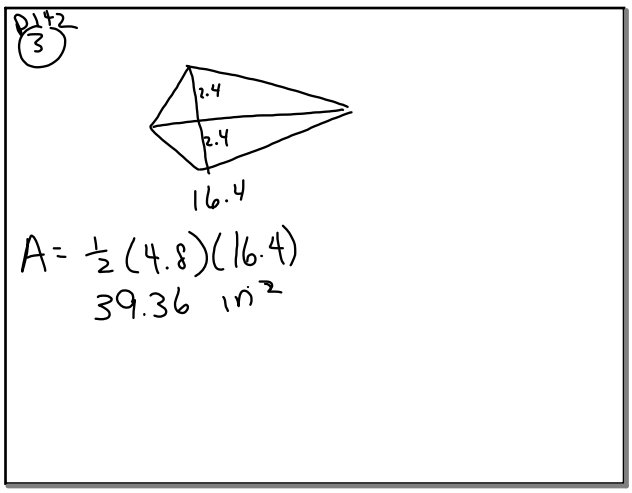
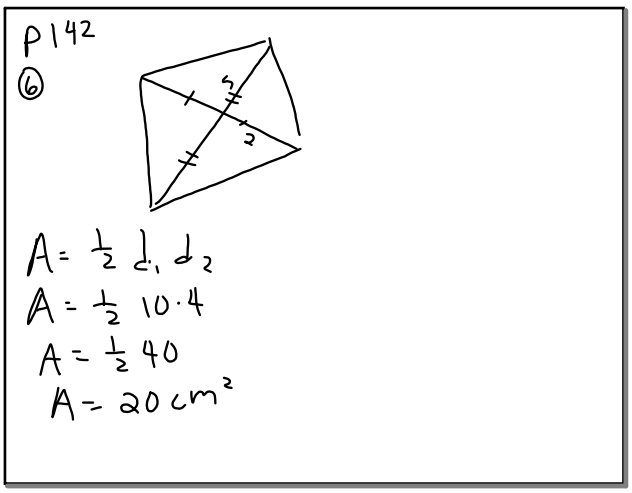


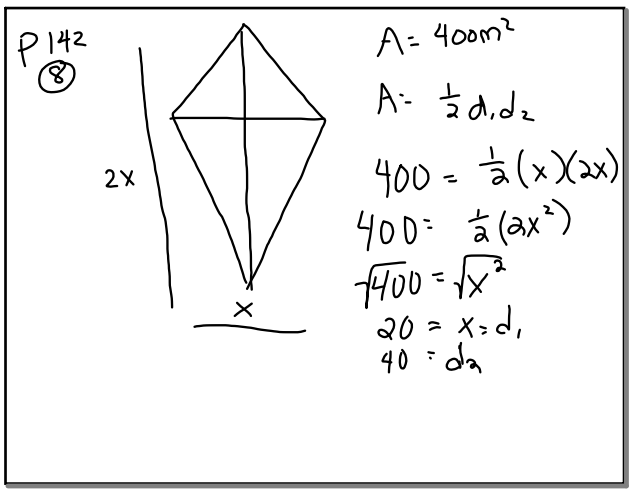
Apr 2-7:48 AM



Apr 2-8:01 AM

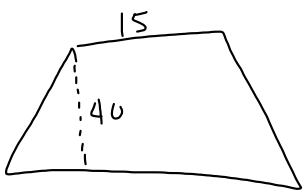


Apr 2-7:59 AM



Apr 2-8:03 AM

p142
(9)



$A = 2400$

$A = \frac{1}{2}h(b_1 + b_2)$

$2400 = \frac{1}{2}(40)(15 + b)$

$2400 = 20(15 + b)$

$2400 = 300 + 20b$

$\frac{2100}{20} = \frac{20b}{20}$

$105 = b$

Apr 2-8:04 AM

Total area = 108

16 rhombi

a) $108 \div 16 = 6.75\ in^2$

b) 27 in long

6 rhombi ◇◇◇◇◇◇

$27 \div 6 = 4.5$ in

$\frac{4.5}{3}$

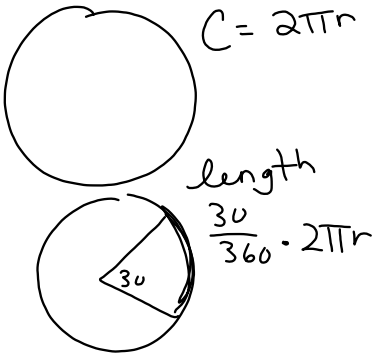
$a = 6.75$

$6.75 = \frac{1}{2} \cdot 4.5x$

$\frac{6.75}{2.25} = \frac{2.25x}{2.25}$

$3 = x$

Apr 2-8:07 AM



$C = 2\pi r$

length

$\frac{30}{360} \cdot 2\pi r$

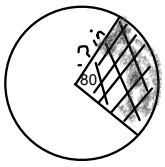
Apr 2-8:57 AM

11.3 circumference and area of a circle

Area = πr^2

$\pi \cdot 4^2 = 16\pi = 50.3 m^2$

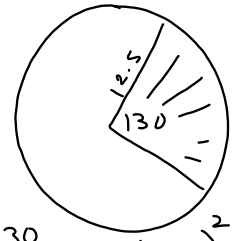
Area of a sector $\frac{\text{degree}}{360} \cdot \pi r^2$



$\frac{80}{360} \cdot \pi 3^2 = 6.3\ in^2$

Apr 2-7:20 AM

Area of Sector



$A = \frac{130}{360} \cdot \pi (12.5)^2 = 177.3 m^2$

Apr 2-8:12 AM

(4)

Area 132.7

What is the diameter

$A = \pi r^2 = 132.7$

$r^2 = \frac{132.7}{\pi}$

$r^2 = 42.24$

$r = 6.5$ $d = 13$

(5) $A = 1134.1$

$A \odot = \pi r^2$

$\frac{1134.1}{\pi} = \frac{\pi r^2}{\pi}$

$360.995 = r^2$

$18.999 = r$

$37.999 = d$

$38 = d$

Apr 2-8:18 AM

Apr 2-8:11 AM