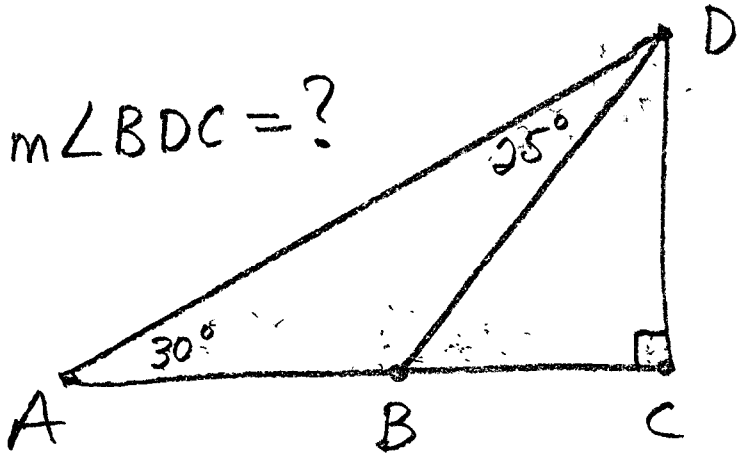
Geometry | Algebra 1 | Thurs. 3-7-13 | CLASS NOTES

12/11

(11) $m\angle BDC = ?$



$m\angle ABD = 125°$

$\therefore m\angle DBC = 55°$ $\quad \therefore m\angle BDC$

$= 180 - 145 = 35°$

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(12) $2x + 9y = -18$. SLOPE OF LINE?

$y = mx + b$

$\frac{9y}{9} = \frac{-2x - 18}{9}$

$y = -\frac{2}{9}x - 2$

m $\quad (0, -2)$

(13) The product of (3.78) and which of the following powers of 10 is 0.000 03 78 ?

(A) 10^{-2} (B) 10^{-4} (C) 10^{-5}

(D) 10^{-7} (E) 10^{-8}

ZERO $1 = \frac{4^3}{4^3} = 4^{3-3} = 4^0$ $\boxed{a^0 = 1}$

$1 = \frac{4^9}{4^9} = 4^{9-9} = 4^0$ EXCEPT $0^0 = 0$

$1 \leq a < 10$ $a \times 10^N$

3.78×10^{-7}

SCIENTIFIC NOTATION

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$378. = 37.8 \times 10^1$

$= 3.78 \times 10^2$

(14) a, x, y are positive integers.

Which is $= x^a y^a$

(F) $(xy)^a$ (G) $(xy)^{2a}$

(H) $(x+y)^a$ (I) $(x+y)^{2a}$

(K) $x(y^a)$

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(15) Which is a factor of

$x^2 - x - 12$?

(A) $x-4$ (B) $x-3$ (C) $x+2$

(D) $x+4$ (E) $x+6$

Sum $= -1$

prod $= -12$

$3 \quad -4$

$(x+3)(x-4) = 0$

(16) Ratio of $\overline{PQ}$ to $\overline{QR}$ is 3:8
What is ratio of $\overline{PQ}$ to $\overline{PR}$?

(E) 3:5 (G) 3:11 (H) 8:3
(J) 11:3 (K) CANNOT BE DETERMINED

(G) 3:11

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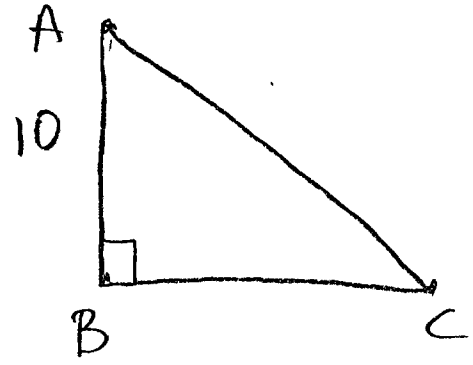
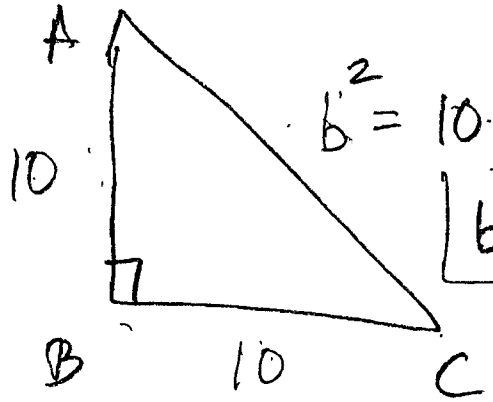
(17) Which function satisfies $f(5) = 12$?

(A) $f(x) = x^2 - 13$
(B) $f(x) = x^2 + 13$
(C) $f(x) = x - 7$
(D) $f(x) = 5x + 12$
(E) $f(x) = 12x + 5$

⑧ Isosceles Right △

AB = 10, AC = ?

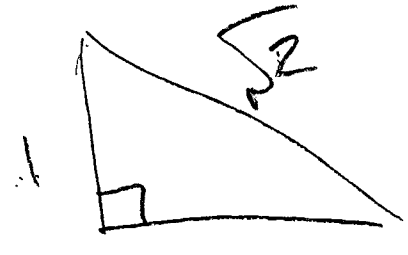




$b^2 = 10^2 + 10^2$

$b = \sqrt{200}$

$b = 10\sqrt{2}$



$= 10\sqrt{2}$

(19) Put in $y = mx + b$ form

$3x + y + 4 = 14 + 2x$

$y = -x + 10$

(22) Paint, Area $= 2650\ ft^2$

1 gal can } cover 400 sq. ft.

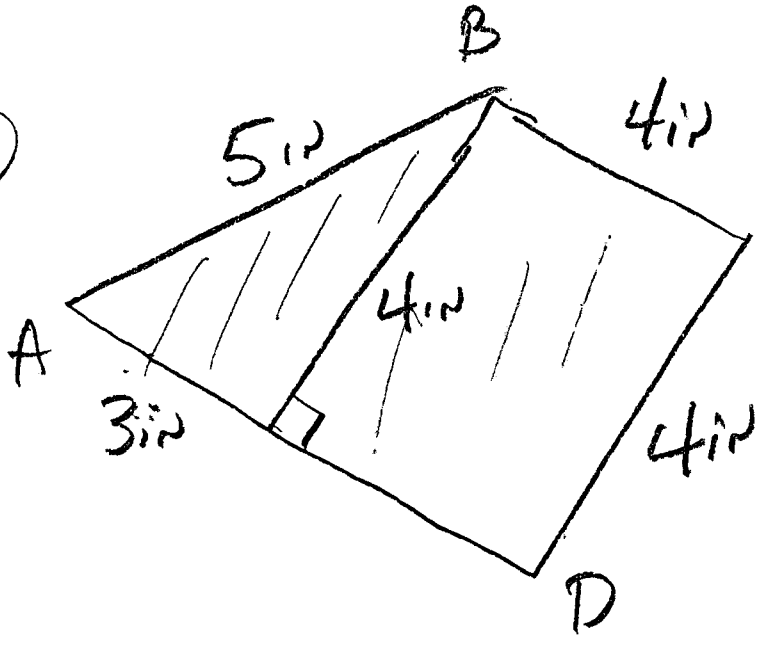
Minimum # of cans ?

For 2 coats of paint.

$$\frac{2 \cdot 2650}{400} = \frac{5.3}{4} = 13.2$$

$\therefore$ 14 cans

(24)



Area of quadrilateral ABCD

$$A_{\square} = 4^2 = 16$$

$$A_{\triangle} = \frac{1}{2}(3 \cdot 4) = 6$$

$$\boxed{22 \text{ in}^2}$$

(Ex) $4x - 8y + 6 + 3x - 2y + 12 + 25x = 7y$

$y = mx + b$

$32x - 10y + 18 = 7y$

$+10y \qquad +10y$

$\frac{32x + 18}{17} = \frac{17y}{17}$

$y = \frac{32}{17}x + \frac{18}{17}$

$m \qquad b$

(Ex) $5x - 2y = -8$

$-5x \qquad\qquad -5x$

$$\frac{-2y}{-2} = \frac{-5x - 8}{-2}$$

$$y = \frac{5}{2}x + 4$$

m

(0, 4)
x, b