Chiles Mini Mu
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The Cat in the Hat

Chiles Mini Mu - Pre-Algebra Solutions

1. $\frac{25}{7-2} - 8 - (4-2)$

$\frac{25}{5} - 8 - 2$

$5 - 10$

-5

<B>2. 

$r = 5''$ $A = \pi r^2$

$= \pi(5)^2$

$= 25\pi$

3. $\frac{5}{3} = \frac{x}{9}$

$3x = 45$

$x = 15$

<C>4. $c - 33 = 8$

$c = 41$

5. 

$r = 1$ $h = 3$

$A = \pi r^2 h = \pi(1)^2(3) = 3\pi$

<C>6. $3^4 = 3 \cdot 3 \cdot 3 \cdot 3 = 81$

$4^3 = 4 \cdot 4 \cdot 4 = 64$

$81 - 64 = 17$

7. $y - 3 = 4(x+5)$

$y - y_1 = m(x - x_1)$ OR

$m = 4$

$y - 3 = 4x + 20$

$y = 4x + 23$

$y = mx + b$

$m = 4$

8. -2 and -1 are negative.

2 is prime.

The answer must be 1.

9. $66\% = \frac{66}{100} = \frac{33}{50}$

<A>10. $76 = 2 \cdot 38 = 2 \cdot 2 \cdot 19$ $108 = 2 \cdot 54 = 2 \cdot 2 \cdot 27 = 2 \cdot 2 \cdot 3 \cdot 9 = 2 \cdot 2 \cdot 3 \cdot 3 \cdot 3$ (4 is not prime)

11. $4(2x - 7)$

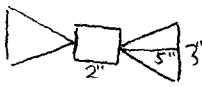
$8x - 28$

<C>12. $7/13 \approx 0.538$

$11/24 \approx 0.458$ ←

Prealgebra - The Cat in the Hat Solutions

(A) 13. $\frac{63 \text{ feet}}{6 \text{ min.}} \cdot \frac{60 \text{ min}}{1 \text{ hour}} \cdot \frac{1 \text{ yard}}{3 \text{ feet}} = 210 \text{ yards/hour}$

(D) 14. 

$A_\triangle = \frac{1}{2}bh = \frac{1}{2}(3)(5)$

$2A_\triangle = 2\left(\frac{1}{2}\right)(3)(5) = 15$

$A_\square = lw = (2)(2) = 4$

$15 + 4 = 19$

(C) 15. $\frac{3+7+9+x}{4} = 11$

$3+7+9+x = 44$

$19 + x = 44$

$x = 25$

(E) 16. 100(the smallest prime number) = 100(2) = 200

$800 - 51 = 749$

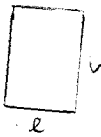
(A) 17. $(t^4)(t^6) = t^{4+6} = t^{10}$

OR

$t^4 = t \cdot t \cdot t \cdot t \quad t^6 = t \cdot t \cdot t \cdot t \cdot t \cdot t$

$(t^4)(t^6) = t \cdot t \cdot t \cdot t \cdot t \cdot t \cdot t \cdot t \cdot t \cdot t$

$= t^{10}$

(D) 18. 

$2w + 2l = 24$

$w + l = 12 \rightarrow 3l + l = 12$

$4l = 12$

$w = 3l \leftarrow l = 3$

$w = 3(3) = 9$

$A_\square = lw = 3(9) = 27$

17 19. $x + |-391| < 980$

$x + 391 < 980$

$x < 591$

590 is the only answer less than 591.

(D) 20. $-2(6) + y = 24$

$-12 + y = 24$

$y = 36$

21. $B = 2(J) \quad J = (7T)$

$B = 2(7T) = 14T$

(D) 22. $\frac{25-20}{20} = \frac{5}{20} = \frac{1}{4} = 25\%$

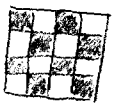
23. $x^3 + 4x^2 - 89x + 51$

4 terms

(B) 24. $x^2 = 9$

$x = \pm\sqrt{9}$

$x = \pm 3$

5. 

$4! + 3! + 2! + 1!$

$= 4(3)(2)(1) + 3(2)(1) + 2(1) + 1$

$= 24 + 6 + 2 + 1$

$= 33$

$2^x = 16 = 2 \cdot 2 \cdot 2 \cdot 2 = 2^4$

$x = 4$

(E) 27. $15 \text{ sec} \cdot \frac{1 \text{ hr}}{3600 \text{ sec}} = \frac{1}{240} \text{ hr}$

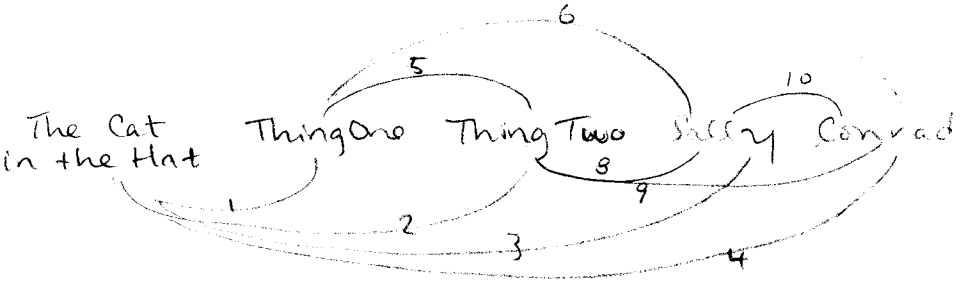
$\frac{2 \text{ cakes}}{\frac{1}{240} \text{ hr}} = \frac{x}{2 \text{ hr}}$

$4 = \frac{1}{240}x$

$x = 960$

Prealgebra - The Cat in the Hat Solutions

(A) 28.



(D) 29. $(6-(56-59))^3 = (6-(-3))^3 = (6+3)^3 = 9^3 = 9 \cdot 9 \cdot 9 = 729$

(B) 30. $\left[\frac{15}{3} - 2 + (5-3)(4)\right] = [5-2+(2)(4)] = 3+8 = 11^{th}$

Unfortunately ...
1 2 3 4 5 6 7 8 9 10 11