

5. Ryan bought a pair of shorts on clearance for \$15.75. If the shorts were 30% off, what was the original price of the shorts?

A. \$4.73
B. \$6.75
C. \$20.48
D. \$22.50
E. \$52.50

12. What is the 209th digit after the decimal point in the repeating decimal $0.\overline{76234}$?

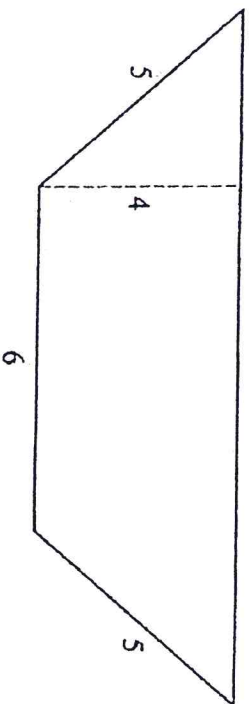
F. 5
G. 4
H. 3
J. 2
K. 0

ALG 2 Bellwork
Wed, Jan 6, 2016

6. Stephanie was s years old 5 years ago. How old will she be 4 years from now?

F. $s + 4$
G. $5(s + 4)$
H. $s + 9$
J. $s - 1$
K. $s + 1$

14. The area of a trapezoid is found by using the equation $\frac{1}{2}h(b_1 + b_2)$, where h is the height and b_1 and b_2 are the lengths of the bases. What is the area of the trapezoid shown below?



F. 18
G. 21
H. 24
J. 30
K. 36

5. Ryan bought a pair of shorts on clearance for \$15.75. If the shorts were 30% off, what was the original price of the shorts?

A. \$4.73
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$X = \text{original price}$

$$\begin{array}{r} .70X = 15.75 \\ .70 \end{array}$$

$$X = 22.50$$

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6. Stephanie was s years old 5 years ago. How old will she be 4 years from now?

F. $s + 4$
G. $5(s + 4)$
H. $s + 9$
J. $s - 1$
K. $s + 1$

5 yrs ago

s

$\frac{AGE}{s}$

Now

$s + 5$

4 yrs from now

$s + 5 + 4$

$= s + 9$

12. What is the 209th digit after the decimal point in the repeating decimal $0.\overline{76234}$?

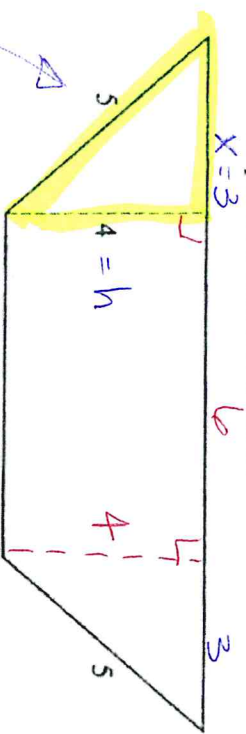
F. 5
G. 4
H. 3
J. 2
K. 0

$0.\overline{76234}$ $\begin{matrix} 5 & 10 & 15 & 20 \end{matrix}$

every multiple of 5 is a 4
so the 205th digit is a 4

206 $\rightarrow 7$
207 $\rightarrow 6$
208 $\rightarrow 2$
209th $\rightarrow 3$

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H. 24
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use Pythagorean theorem to find x

$x = 3$

$b_1 = 6$
 $b_2 = 3$
 $h = 4$

$A = \frac{1}{2}(6+3) \cdot 4$

$A = 21$