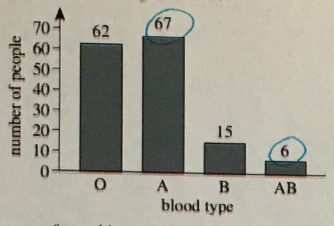
April 1
ACT PRACTICE QUESTIONS: ANSWERs PROVIDED NEXT WEEK.

1. The blood types of 150 people were determined for a study as shown in the figure below.



If 1 person from this study is randomly selected, what is the probability that this person has either Type A or Type AB blood?

A. $\frac{62}{150}$
B. $\frac{66}{150}$
C. $\frac{68}{150}$
D. $\frac{73}{150}$
E. $\frac{84}{150}$

add up the people who have type A and AB blood from the graph.

67 - A
6 - AB
73

$\frac{73}{150}$

2. The monthly fees for single rooms at 5 colleges are $370, $310, $380, $340, and $310, respectively. What is the mean of these monthly fees?

F. $310
G. $340
H. $342
J. $350
K. $380

mean is average. add up all 5 values and divide by how many colleges there are (5)

$= \frac{370 + 310 + 380 + 340 + 310}{5}$

$= 342$

3. On a particular road map, $\frac{1}{2}$ inch represents 18 miles. About how many miles apart are 2 towns that are $2\frac{1}{2}$ inches apart on this map?

A. 18
B. $22\frac{1}{2}$
C. 36
D. 45
E. 90

$18 \cdot 5 = 90$

how many $\frac{1}{2}$'s are there in $2\frac{1}{2}$? There are 5, so if each increment of $\frac{1}{2}$ is 18mi then multiply that by 5

4. Given $f = cd^3$, $f = 450$, and $d = 10$, what is c?

F. 0.45
G. 4.5
H. 15
J. 45
K. 150

$f = cd^3$
$450 = c(10)^3$
$\frac{450}{1000} = \frac{1000c}{1000}$
$c = 0.45$

plug in the values of f and d. Then solve

5. If $f(x) = (3x + 7)^2$, then $f(1) = ?$

A. 10
B. 16
C. 58
D. 79
E. 100

$f(1) = (3(1) + 7)^2$
$f(1) = (3 + 7)^2$
$f(1) = 10^2$
$f(1) = 100$

this means plug in a 1 wherever there is an x and use PEMDAS to simplify.

6. Jorge's current hourly wage for working at Denti Smiles is $12.00. Jorge was told that at the beginning of next month, his new hourly wage will be an increase of 6% of his current hourly wage. What will be Jorge's new hourly wage?

F. $12.06
G. $12.60
H. $12.72
J. $18.00
K. $19.20

$12.00 × .06 = 0.72

convert the decimal to a percent by moving the decimal two places to the left

$12.00
+.72
$12.72

6% of $12 is .72, add that to his original $12 salary to get his new salary of $12.72