. . 1)

. . 2) What is the weighted-average of one

dice roll?

. . 3) What is the larger solution of:

?

. . 4) How many prime numbers are

between 45 and 65?

. . 5) What is the ordinate of the x-

intercept of the line that is

perpendicular to ?

. . 6) ?

. . 7) Write as a completely

reduced and simplified fraction.

. . 8) What is the hypotenuse of a triangle

with side lengths and

. . 9)

. . 10) If 30% of X is 60, what is 40% of X?

. . 11)

. . 12)

. . 13) What is the sum of the exterior

angles (in degrees) of a dodecagon?

. . 14) If , what is

?

. . 15) What is the smallest Fibonacci

number over 40?

. . 16) How many weeks are in one 30-day

month?

. . 17)

. . 18) If what is

. . 19)

. . 20) A circle has a circumference of 4.

What is the length of the radius?

. . 21)

. . 22)

. . 23)

. . 24) What is the remainder when 2013 is

divided by 13?

. . 25) What is the third largest integral

factor of 534?

. . 26)

. . 27) What is the sum of the roots of: ?

. . 28) A bat and a ball together cost $1.10.

The bat is $1 more than the ball.

How much does the ball cost?

. . 29) What is the acute angle a clock

makes when the time is 3:15PM?

. . 30) A polygon with 20 diagonals has how

many sides?

. . 31) What is the units digit of ?

. . 32) ?

. . 33) ?

. . 34) If is the hole of the graph , what is ?

. . 35) Which is bigger: or ?

. . 36) What is the probability of flipping 4

heads in a row on a fair coin?

. . 37) What is the fifth term of an arithmetic

sequence with third term and common difference ?

. . 38) How many ways can you sit 6 people

at a circular table that seats 3?

. . 39) A bacteria doubles itself each day. It

takes 64 days for it to cover an entire

pond. On what day is the pond 25%

covered by bacteria?

. . 40) Kristen has 4 sons. What is the

chance her next child will be a boy?