- 1. (2 points) Pamela practices piano five days every week. She practices 40 minutes on Mondays, 20 minutes on Tuesdays and Thursdays, 10 minutes on Saturdays, and 50 minutes on Sundays. How many minutes does Pamela spend practicing piano every week?
- 2. **(2 points)**

$$\begin{array}{rcl} A & = & 7 - 3 \times 2 + 1 \\ B & = & 5 \times (24 - 20) \\ C & = & 56 - 32 - (12 \times 2) \end{array}$$

Find $A \times B \times C$

- 3. (2 points) Kavitha needs to water ten plants. Each plant requires five cups of water. If Kavitha has a bucket that carries three cups of water, at least how many buckets of water does Kavitha need to water all ten plants?
- 4. (2 points) How many of the following numbers are divisible by 7? (735, 372, 161, 322, 229)
- 5. (3 points) Solve the following expression using the order of operations.

$$(2 \times 5) + 4 \div 2 - (5 \times (4 - 2)) + 2$$

6. (3 points) Find the number that goes in each blank of the following sequences.

 $A = \text{The number in the blank}: 1, 4, 7, 10, 13, 16, ___, 22, 25$

 $B = \text{The number in the blank}: 1, 2, 4, 8, __, 32, 64$

 $C = \text{The number in the blank}: 1, 1, 2, 3, 5, __, 13, 21$

Find A + B - C

- 7. (3 points) What is $\frac{4}{3} \times \frac{1}{2} \times \frac{9}{5}$ as a decimal?
- 8. (3 points) Tommy draws his three favorite shapes as shown below.



Shape 1



Shape 2



Shape 3

The number of lines of symmetry in Shape 1, if all four sides are equal.

The sum of the sides of Shapes 1, 2, and 3.

The number of letters in the name of Shape 3.

Find B - A - C

9. **(4 points)** Let

$$A = 4000 = 4000$$
 equal 32% of 250

What is A - B

- 10. **(4 points)** Compute 11111 × 11111
- 11. (4 points) 180 Rickards students went to the zoo last week. Some students saw Tony the Horse or Ran the Panda. If 58 students saw Ran the Panda, 104 students saw Tony the Horse, and 36 students saw both Tony the Horse and Ran the Panda, how many students saw neither Tony nor Ran?
- 12. (4 points) Ian the penguin has a tank with 12 fish. In his tank there are 5 red fish, 3 green fish and 4 rainbow fish.

A =What is the probability that Ian will choose a rainbow fish, if Ian randomly picks one fish from the tank.

B =What is the probabilty that Ian will choose a rainbow fish, if Ian eats 2 red fish.

Find $\frac{A}{B}$

- 13. (5 points) Matthew the Unicorn is trying to find the volume of his horn. His horn is in the shape of a perfect cone. To solve for the volume of the horn, Matthew uses the formula $\frac{\pi r^2 h}{3}$ which solves for the volume of a cone where r is the radius and h is the height. If the radius of the base of the horn is 5 and the height is 3, what is the volume of the horn? (Use the approximation $\pi \approx 3$)
- 14. **(5 points)** Alexander is trying to calcuate the percent tax that was put on his purchase of 9 pillows. If each pillow costs \$4.00, without tax, and the total cost of the pillows was \$40.32, with tax, what was the percent tax?
- 15. (5 points) Given that 25 is equal to 5×5 , also written as 5^2 . 8 is equal to $2 \times 2 \times 2$, also written as 2^3 . 256 is equal to $4 \times 4 \times 4 \times 4$, also written as 4^4 . Find the value of 3^3 . (Express your answer as an integer)