1) **C** $2 + 8 + 3 + 7 + 5$
$= 10 + 10 + 5$
$= 25$

2) **A** $9 + 3 + 3 - 6 - 6$
$= 9 - 6 + 3 + 3 - 6$
$= 3 + 0$
$= 3$

3) **C**   Half of six is three because $3 + 3 = 6$, so Charlotte give away three cookies. Therefore, she has $6 - 3 = 3$ cookies left.

4) **C**   The pattern switches between a number and the letter Z, where every number is two larger than the last. Therefore, the next term is $5 + 2 = 7$.

5) **C**   The pet which is not a dog is a cat, so the other one is a dog.

6) **A**   43534 is the only option which reads the same forwards and backwards.

7) **A**   **First box:** Put 4 lightbulbs in the first box.
Now, $12 - 4 = 8$ lightbulbs are left.
Second box: Put 4 lightbulbs in the second box.
Now, $8 - 4 = 4$ lightbulbs are left.
Third box: Put the last 4 lightbulbs in the third box.
Now, $4 - 4 = 0$ lightbulbs are left.

8) **D**   Tang is 3 years older than his 2 year-old sister. Therefore, Tang is $2 + 3 = 5$ years old.

9) **C**   Rephrase: All three friends caught a fish except one. Therefore, $3 - 1 = 2$ friends caught a fish.

10) **B**   To get 8 pieces of bread, Heidi needs to make 7 parallel cuts.

11) **D**   **First scoop:** 15 mL. Now she has 15 mL.
Second scoop: Add another 15 mL. Now she has $15 + 15 = 30$ mL.
Third scoop: Add another 15 mL. Now she has $30 + 15 = 45$ mL.
Fourth scoop: Add another 15 mL. Now she has $45 + 15 = 60$ mL.

12) **B**   Lola started reading at the top of page 11, meaning she didn't read 10 pages. Therefore, she read $27 - 10 = 17$ pages.

13) **B**   If Rose passes the person in second place there will be one person in front of her, the person in first place. Therefore, she will finish in the second place!

14) **B**   Between all three friends there are a total of $7 + 3 + 2 = 12$ crayons.
Twelve crayons divided by three friends is $12 \div 3 = 4$ crayons for each friend.

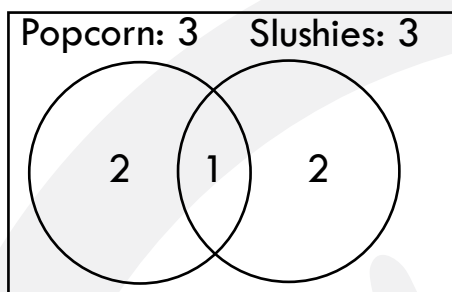15) **A** 35 − 2 − 7 − 3 − 10
= 35 − 22
= 13

16) **A** The number of pathways that Tim's friends have to take to each intersetion is shown in the diagram. There are 15 pathways.
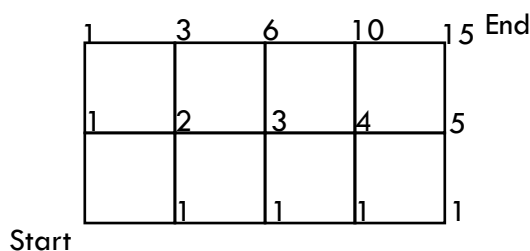

17) **A** There are 5 people in total. However, if you add the 3 people that bought popcorn to the 3 people that bought slushies, it gives a total of 3 + 3 = 6 people.

Therefore, 6 − 5 = 1 person was counted twice, one person bought both.

18) **C** Work backwards from December 8th: one week before is Decemebr 1st, three days after December 1st is December 4th. Therefore, Cole's flight leaves on December 4th.

19) **C** Each cube has six faces, however the two faces where the cubes meet aren't painted. Therefore, 6 + 6 − 2 = 10 faces are painted in total.

20) **A** Label each region of the diagram and use a chart to help count:
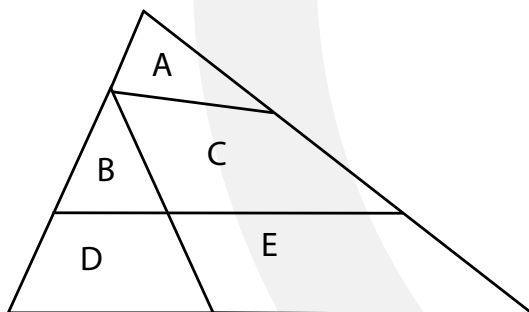
# of Letters	Name of Triangles	# of Triangles
1	A, B	2
2	BD	1
3	ABC	1
5	ABCDE	1
Total:		5