Stage I   Question Set 1

1) 20 questions
2) Completion time 30 to 40 minutes
3) Calculators are permitted
4) No penalty for incorrect answers
5) Diagrams are not drawn to scale

QUESTION #1:
What is the largest number in this set?

(a) 1.01   (b) 1.002   (c) 1.101   (d) 1.1   (e) 1.02

QUESTION # 2:

What is the sum of $6 + \dfrac{3}{100} + \dfrac{2}{1000}$ **?**

(a) 6.32   (b) 6.032   (c) 6.0032   (d) 6.302   (e) 6.3002

QUESTION #3:
Dillon is building a square patio with an area of 25 m². What is the perimeter of Dillon's patio in meters?

(a) 50   (b) 100   (c) 25   (d) 20   (e) 60

QUESTION #4:
A bus to a local ski hill has 44 passengers. 22 passengers are going to ski and 19 passengers are going to snowboard. Of these, 6 passengers plan to do both. How many passengers are not going to participate in either activity?

(a) 3   (b) 7   (c) 5   (d) 9   (e) 19

QUESTION #5:
The average age of the four Carlson children is 8. Two of the children are 6 and 9 years old. What is the sum of the other two children's ages?

(a) 17   (b) 23   (c) 15   (d) 30   (e) 31

QUESTION #6:
Martina and Carlos agreed to meet at 11:35 a.m. for lunch. Martina arrives on time, but Carlos is 1½ hours late. What time did Carlos arrive for lunch?

(a) 12:05   (b) 12:25   (c) 12:55   (d) 1:35   (e) 1:05

QUESTION #7:
Part of Meagan's job at the "Mighty Dog" is to fill the juice dispenser. The dispenser holds a maximum of 14 liters of juice. When the dispenser is one-quarter full, how many liters of juice must Meagan add to fill it?

(a) 3.5   (b) 7   (c) 10.5   (d) 12   (e) 14

QUESTION #8:
Frank and Ernie each receive an allowance. Frank, being older, always receives $4 more than Ernie. If Ernie receives x dollars for allowance, how much does Frank receive?

(a) 4x   (b) 4-x   (c) x-4   (d) x÷4   (e) x+4

QUESTION #9:
Bruno decided to buy everyone in his family a pair of gloves for Christmas. Bruno has 12 members in his family, and each pair of gloves costs $15.00 plus a sales tax of 14%. How much money will Bruno spend on his Christmas gifts?

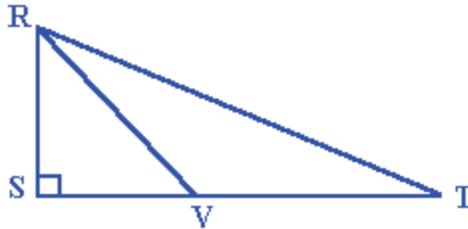(a) $180   (b) $202   (c) $202.20   (d) $205   (e) $205.20

QUESTION #10:
Brenda's den is in the shape of an isosceles triangle. She measures two sides of her den and finds that they are 6 meters and 2 meters. What is the perimeter of Brenda's den?

(a) 8 meters   (b) 14 meters   (c) 10 meters   (d) 72 meters   (e) 18 meters

QUESTION #11:
If RS = 6cm, ST = 14cm, and triangle RVT has an area of 28 cm², what is the area of triangle RSV in cm²?

(a) 14   (b) 28   (c) 20   (d) 56   (e) 84

QUESTION #12:
Danny, Charles and Julie got their math exam scores back. The sum of their scores is 150. Charles scored 12 marks higher than the average of the three scores, while Julie scored 3 marks lower than the average. What was Danny's score on the exam?

(a) 38   (b) 41   (c) 47   (d) 50   (e) 62

QUESTION #13:
Sandy's annual income is 80% of Cindy's. Thus, Cindy's annual income is x% of Sandy's. What is the value of x?

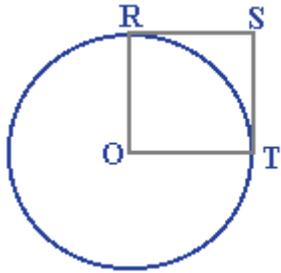(a) 60   (b) 75   (c) 80   (d) 90   (e) 125

QUESTION #14:
Mark leaves his home and drives 4 km east, then 3 km north to the nearest TacoDan's. What is the shortest distance between TacoDan's and Mark's home?

(a) 5   (b) 7   (c) 8   (d) 9   (e) 12

QUESTION #15:
The area of the square is 25 cm². What is the area, in cm², of the circle with center O and radius OR?

(a) 5π   (b) 10π   (c) 20π   (d) 25π   (e) 50π

QUESTION #16:
Amos bought a music CD for $11.97. He gave the sales clerk $20, but by mistake, the sales clerk gave him $11.97 back in change. How much money should honest Amos return to the sales clerk to correct the mistake?

(a) $2.93   (b) $3.94   (c) $4.95   (d) $5.62   (e) $8.03

QUESTION #17:
The three Simon sisters are very secretive about their ages. They only give one clue to people who ask. They say that when their ages are added two at a time, the sums are 68, 75, and 77. What is the age of the oldest Simon sister?

(a) 35   (b) 38   (c) 39   (d) 41   (e) 42

QUESTION #18:
Luremin, the local fisher, has a catch of pink salmon and coho salmon. Five pink and three coho salmon weigh 29 kg. Four pink and two coho weigh 22 kg. Assuming that all pink salmon are equal weight, and all coho salmon are equal weight, what is the weight of three pink and one coho salmon?

(a) 15 kg   (b) 18 kg   (c) 28 kg   (d) 32 kg   (e) 36 kg

QUESTION #19:
Calvin's expensive Polex watch gains 6 minutes for every hour. Calvin sets his watch to the correct time at 8:00 a.m. Later that day, Calvin looks at his watch and sees that it is 5:00 p.m. What time is it really?

(a) 4:11   (b) 4:24   (c) 4:54   (d) 5:06   (e) 5:54

QUESTION #20:
In a magic square, the numbers in any row, column or diagonal must add up to give the same total. In this case, what is the value of H?

8		
3		7
4	H	

(a) 5   (b) 2   (c) 9   (d) 6   (e) 1