#1

Choose the best answer

Dale and Chuck are training to run a marathon. Ryan, their trainer, showed up half way through their training session and saw that Dale had completed 13 laps and was setting a pace of 9 laps per hour, and Chuck was done 21 laps and was setting a pace of 7 laps per hour. If they both tied in the end, how long did it take them to finish?

- 49 laps took them 4 hours
- 46 laps took them 5 hours
- 48 laps took them 4 hours
- 47 laps took them 4 hours

Show your work

#2

Choose the best answer

Andrew uses rechargeable batteries. One battery has already been charged 14 percent and charges at a rate of 5 percent an hour. Andrew starts charging another battery that still has 10 percent of its charge left, and charges at a rate of 7 percent an hour. How long will it be until both batteries are at the same charge percentage? What percentage will they have charged?

- 26% after 3 hours
- 27% after 2 hours
- 22% after 2 hours
- 24% after 2 hours

Show your work

#3

Choose the best answer

A large order has been put in at a pizza place for a school event. Emily and Hailey are both quick at making pizzas. Hailey can make 6 pizzas an hour and has already made 16. Emily has made 12 and can make 10 pizzas an hour. When they both reach the same number of pizzas total they will be done. How many pizza will they have made between now and finishing, and how long will it take?

- 20 pizzas after 1 hours
- 24 pizzas after 1 hours
- 26 pizzas after 2 hours
- 22 pizzas after 1 hours

Show your work

#4

Choose the best answer

Dale and Chuck are training to run a marathon. Madeline, their trainer, showed up half way through their training session and saw that Dale had completed 16 laps and was setting a pace of 5 laps per hour, and Chuck was done 18 laps and was setting a pace of 4 laps per hour. If they both tied in the end, how long did it take them to finish?

- 26 laps took them 2 hours
- 21 laps took them 2 hours
- 30 laps took them 3 hours
- 27 laps took them 2 hours

Show your work

#5

Choose the best answer

Dale and Chuck are training to run a marathon. Sydney, their trainer, showed up half way through their training session and saw that Dale had completed 22 laps and was setting a pace of 4 laps per hour, and Chuck was done 12 laps and was setting a pace of 9 laps per hour. If they both tied in the end, how long did it take them to finish?

- 33 laps took them 3 hours
- 32 laps took them 2 hours
- 27 laps took them 2 hours
- 30 laps took them 2 hours

Show your work

#6

Choose the best answer

Dale and Chuck are training to run a marathon. Ashley, their trainer, showed up half way through their training session and saw that Dale had completed 21 laps and was setting a pace of 2 laps per hour, and Chuck was done 14 laps and was setting a pace of 9 laps per hour. If they both tied in the end, how long did it take them to finish?

- 21 laps took them 2 hours
- 24 laps took them 1 hours
- 23 laps took them 1 hours
- 22 laps took them 1 hours

Show your work

#7

Choose the best answer

A fashion photographer needs to hire a stylist to prepare his models for a shoot. Joseph charges $22 for showing up plus $4 per hour. Isabella charges $12 to show up plus $9 per hour. Given the expected duration of his photo shoot, either stylist would cost him the same amount. What would the cost be? What would the duration be?

- ○ $30 for 2 hours
- ○ $28 for 2 hours
- ○ $26 for 2 hours
- ○ $31 for 3 hours

Show your work

#8

Choose the best answer

Mia has just unplugged her fridge so it can defrost. The freezer is at 22 degrees and warms up at 9 degrees an hour. The fridge part is at 14 degrees and rises 11 degrees per hour. How many hours will it take for both the fridge and the freezer to be the same temperature? What is the temperature change in that time span?

- ○ 61 degrees in 5 hours
- ○ 53 degrees in 4 hours
- ○ 58 degrees in 4 hours
- ○ 59 degrees in 4 hours

Show your work

#9

Choose the best answer

Alexander and Connor are in a hot dog eating competition. By the time Madison gets there Alexander has eaten 15 hot dogs and Connor has eaten 21. According to their stats Alexander can eat 9 hot dogs a minute, while Connor can eat 7. How long will it be until they are tied, and how many hot dog will they have eaten in that time?

- ○ 41 each after 3 minutes
- ○ 42 each after 3 minutes
- ○ 37 each after 4 minutes
- ○ 39 each after 3 minutes

Show your work

#10

Choose the best answer

Darren and Gavin are in a hot dog eating competition. By the time Natalie gets there Darren has eaten 16 hot dogs and Gavin has eaten 12. According to their stats Darren can eat 3 hot dogs a minute, while Gavin can eat 4. How long will it be until they are tied, and how many hot dog will they have eaten in that time?

- ○ 24 each after 4 minutes
- ○ 31 each after 5 minutes
- ○ 25 each after 4 minutes
- ○ 28 each after 4 minutes

Show your work

#11

Choose the best answer

A large order has been put in at a pizza place for a school event. Christopher and Caden are both quick at making pizzas. Caden can make 7 pizzas an hour and has already made 14. Christopher has made 16 and can make 6 pizzas an hour. When they both reach the same number of pizzas total they will be done. How many pizza will they have made between now and finishing, and how long will it take?

- ○ 28 pizzas after 2 hours
- ○ 27 pizzas after 2 hours
- ○ 33 pizzas after 2 hours
- ○ 26 pizzas after 3 hours

Show your work

#12

Choose the best answer

Daniel is going to ship some gifts to family members, and he is considering two shipping companies. The first shipping company charges a fee of $22 to ship a medium box, plus an additional $4 per pound. A second shipping company charges $12 for the same size of box, plus an additional $9 per pound. At a certain weight, the two shipping methods will cost the same amount. What is that weight? How much will it cost?

- ○ 2 pounds would cost $35
- ○ 2 pounds would cost $30
- ○ 2 pounds would cost $34
- ○ 3 pounds would cost $28

Show your work

Question	Answer
#1	choice 1
#2	choice 4
#3	choice 4
#4	choice 1
#5	choice 4
#6	choice 3
#7	choice 1
#8	choice 3
#9	choice 2
#10	choice 4
#11	choice 1
#12	choice 2