

Student Name: _____

Grade: _____ Date: _____



1. The opening ceremony of the 2016 Paralympics in Rio de Janeiro included a blackout scene, with dancers lit up by 400 illuminated canes. If 2% of those canes didn't work, how many DID work?



2. New cricket rules for junior players mean that for Under-11s, they will have a cricket pitch 15 metres long, instead of the 20-metre length of full-sized pitch. If a player makes 25 runs on the adult-length pitch, how many runs does he have to make on the shorter 15-metre pitch to run an equal distance?

3. If Jess and Johnny are standing in a single-file queue to buy the new iPhone 7s, in how many different ways can they queue up in single file? That means, how many different orders can they stand in?



4. Now, Jim comes along and joins the queue in Question 3 above. In how many ways can they queue up now?

5. WOW! Now, believe it or not James comes along and joins the queue in Question 4. How many different arrangements (orders) can they stand in now? Can you start to see a pattern? Check your answers for a pattern.



6. OH! NO! Now another person has joined the queue in Question 5. In how many different orders can these 5 people stand in the queue. **HINT: ALWAYS look for a pattern!** There IS an easy way to find how many arrangements. Look for it! (Ask your teacher if you need some help!)

7. For the school holidays, you'll need to have your dog looked after by a dog kennel. The kennel charges \$25 per day, and you need a 10% deposit up front. If you're going away for 12 days, how much do you need to pay up front?



8. A huge Coca Cola sign was auctioned this week, with each letter being sold individually. The funds went to charity. The most expensive letter was the lower-case "c" that sold for \$18,700, while the two capital "C" letters sold for \$10,300 each. If the total raised for charity was \$100,700 what was the average price of the other letters?

9. **Open-ended Question:** Write your own age this year in Roman numerals.

ANSWERS – EdShop Worded Maths Extension Worksheet EW 35 16

1. 392 DID work!
2. 30 runs
3. 2 ways
4. 6 ways
5. 24 ways ($= 4 \times 3 \times 2$)
6. 120 ways ($= 5 \times 4 \times 3 \times 2$)
7. \$30 deposit
8. \$12,280 is the AVERAGE price of the other letters
9. Various answers for various ages