

1.	$xy > 0$ Quantity A $\frac{x}{y}$	Quantity B 0
2.	$a > 0$ Quantity A $a^b$	Quantity B 0
3.	Quantity A $\frac{2^{50}}{3^{50}}$	Quantity B $\frac{2^{50}+7^{20}}{3^{50}+7^{20}}$
4.	Quantity A $\frac{\sqrt{10}}{\sqrt{8}} \div \frac{\sqrt{9}}{\sqrt{10}}$	Quantity B $\frac{\sqrt{11}}{\sqrt{9}} \div \frac{\sqrt{10}}{\sqrt{11}}$
5.	$x$ & $y$ are positive Quantity A $xy$	Quantity B $(xy)^2$
6.	Quantity A $2 \times 3 \times 4 \times \dots \times 23$	Quantity B $5 \times 6 \times 7 \times \dots \times 24$
7.	Quantity A $\frac{\sqrt{65} - \sqrt[3]{63}}{\sqrt{15}}$	Quantity B 1
8.	$\sqrt[3]{m^4} = \frac{7}{11}$ Quantity A $m$	Quantity B $\frac{7}{11}$
9.	Quantity A $9\frac{3}{4}$	Quantity B $9 + \frac{3}{4}$
10.	$N = 113 \times 133 \times 239 \times 169 \times 209$ . Quantity A Increase in $N$ when 113 is increased by 20	Quantity B Increase in $N$ when 169 is increased by 20
11.	$x > y > 0$ Quantity A $\left(\frac{x}{y} + \frac{y}{x}\right)$	Quantity B 2
12.	Quantity A The tens digit of $(4^{100} \times 5^{99})$	Quantity B The tens digit of $(4^{100} \times 5^{101})$
13.	$n$ is an integer Quantity A $7.23 \times 10^{(n+1)}$	Quantity B $723 \times 10^{(n-1)}$
14.	Quantity A $100! \times 100!$	Quantity B $99! \times 101!$
15.	The function $f$ is defined for all numbers $x$ by $f(2x) = x^2 - 2x + 8$ Quantity A $f(6)$	Quantity B 12

- 16.** A bowl contains jelly beans, 10% of which are green and the rest are blue. To this bowl  $n$  green jelly beans and  $10n$  blue jelly beans will be added, where  $n > 0$
- |  |            |
|--|------------|
| Quantity A   | Quantity B |
| After the $11n$ jelly beans are added to the bowl, the percent of the jelly beans in the bowl that will be green | 10%        |
- 17.**  $n$  is an integer between 100 & 200 such that when  $n$  is divided by 9, the remainder is 4.
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|-------------------------------|------------|
| Quantity A                    | Quantity B |
| No. of possible values of $n$ | 11         |
- 18.**  $ab < 0$  &  $a^2 < b^2$
- |            |            |
|------------|------------|
| Quantity A | Quantity B |
| $(a+b)$    | $(b-a)$    |
- 19.**
- |                 |                   |
|-----------------|-------------------|
| Quantity A      | Quantity B        |
| $\frac{x+1}{x}$ | $1 + \frac{1}{x}$ |
- 20.**  $P, R$  &  $R$  are 3 consecutive multiples of 3 and  $P < Q < R$
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|------------|------------|
| Quantity A | Quantity B |
| $(P+Q+3)$  | $(Q+R-3)$  |

1. A	2. A if $b \in \mathbb{R}$ D if $b \in \mathbb{C}$	3. B	4. A	5. D
6. C	7. A	8. A	9. C	10. A
11. A	12. C	13. C	14. B	15. B
16. B	17. B	18. D	19. C	20. C