|  |  |  | INDIAN SCHOOL AL WADI AL KABIR <br> Class VII, Mathematics WORKSHEET- (MCQ) DIRECT \& INVERSE PROPORTION |  |  |  |  |  |
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| Multiple Choice questions |  |  |  |  |  |  |  |  |
| Q.1. | If the cost of 12 books is ₹ 450, then the cost of 16 books is: |  |  |  |  |  |  |  |
|  | A | ₹ 500 | B | ₹ 615 | C | ₹ 650 | D | ₹ 600 |
| Q.2. | If two quantities x and y are in direct proportion, then: |  |  |  |  |  |  |  |
|  | A | $x+y$ remains constant | B | $\frac{x}{y}$ remains constant | C | $x-y$ remains constant | D | $x \times y$ remains constant |
| Q.3. | $x$ and $y$ are in direct proportion. When $x$ is $8, y$ is 12 . Which of the following is not a possible pair of corresponding values of $x$ and $y$ ? |  |  |  |  |  |  |  |
|  | A | 10 and 15 | B | 2 and 3 | C | 6 and 9 | D | 15 and 20 |
| Q.4. | A car can cover a distance of 210 km in 5 hours. It can cover a distance of 546 km with the same speed in: |  |  |  |  |  |  |  |
|  | A | 13 hours | B | 12 hours | C | $12 \frac{1}{2}$ hours | D | None of these |
| Q.5. | A garrison of 300 men had food for 20 days. However, 50 men leave. Now the food will last: |  |  |  |  |  |  |  |
|  | A | 26 days | B | 24 days | C | 120 days | D | 18 days |
| Q.6. | An electric pole, 14 m high, casts a shadow of 10 m . Find the height of a tree that casts a shadow of 15 m under similar conditions. |  |  |  |  |  |  |  |
|  | A | 19 m | B | 29m | C | 21 m | D | 20 m |
| Q.7. | 12 men can dig 8 m long trench in a day. How many men should be employed for digging 50 m long trench of the same type in one day? |  |  |  |  |  |  |  |
|  | A | 75 | B | 25 | C | 50 | D | 96 |
| Q8. | The perimeter of a square and its side is in: |  |  |  |  |  |  |  |
|  | A | Direct Proportion | B | Indirect Proportion | C | Neither direct nor indirect | D | Cannot be determined |
| Q9 | The fuel consumption of a vehicle is 6.8 L per 102 km . What distance can this vehicle cover in 24 L of fuel? |  |  |  |  |  |  |  |


|  | A | 320.5 km | B | 382.5 km | C | 693.6 km | D | 163.2 km |
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| Q10 | If 100 students took 20 days to clean a garden. How many days it will take to clean the garden if 25 more students are added? |  |  |  |  |  |  |  |
|  | A | 10 | B | 12 | C | 18 | D | 16 |
| FILL IN THE BLANKS |  |  |  |  |  |  |  |  |
| Q11 | 32 men can reap a field in 15 days. Then, 20 men reap the same field in ----- number of days. |  |  |  |  |  |  |  |
| Q12 | The cost of 2 dozen of oranges is ₹ 48 . Then the cost of 108 oranges is -------. |  |  |  |  |  |  |  |
| Q13 | 6 men can complete a work in 32 days. How many men can complete the work in 8 days? |  |  |  |  |  |  |  |
| Q14 | $x$ varies inversely with $y$. When $x=6$, then $y=8$. When $x=8$, the value of $y$ is ----- . |  |  |  |  |  |  |  |
| Q15 | A train is moving at a uniform speed of $75 \mathrm{~km} /$ hour. How far will it travel in 20 minutes? |  |  |  |  |  |  |  |
|  | CASE STUDY: Ramayah was running a hostel for college students near the college. The hostel was very famous for its clealiness and discipline. At this context, answer the following questions: |  |  |  |  |  |  |  |
| Q 16 | There are 125 students in a hostel. Food provision for them is for 16 days. How long will these provisions last, if 75 more students join the group? |  |  |  |  |  |  |  |
|  | A | 20 days | B | 10 days | C | 15 days | D | 12 days |
| Q 17 | 24 fans are fixed in 12 rooms. How many fans are required in 240 rooms? |  |  |  |  |  |  |  |
|  | A | 80 | B | 120 | C | 480 | D | 160 |
| Q 18 | If a box of sweets is divided among 24 children, they will get 5 sweets each. How many would each get, if the number of the children is reduced by 4 ? |  |  |  |  |  |  |  |
|  | A | 4 | B | 8 | C | 6 | D | 5 |


| Q 19 | 72 beds are arranged in 4 floors. How many floors do the hostel have if 360 beds are provided? |  |  |  |  |  |  |  |
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|  | A | 20 | B | 18 | C | 16 | D | 14 |
| Q 20 | 6 pipes are required to fill a tank in 1 hour 20 minutes. If we use 5 such types of pipes, how much time it will take to fill the tank? |  |  |  |  |  |  |  |
|  | A | 1 hour 30 minutes | B | 2 hours | C | 1 hour 36 minutes | D | 1 hour |

ANSWERS

| 1. | D | 2. | B | 3. | D | 4. | A |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 5. | B | 6. | C | 7. | A | 8. | A |
| 9. | B | 10. | D | 11. | 24 days | 12. | ₹ 216 |
| 13. | 24 men | 14. | 6 | 15. | $25 \mathrm{~km} / \mathrm{hour}$ | 16. | B |
| 17. | C | 18. | C | 19. | A | 20. | C |

