

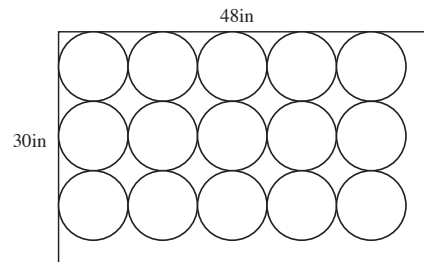
## Test 2: Shop Arithmetic

### Answers

- |      |      |       |       |       |
|------|------|-------|-------|-------|
| 1. B | 6. C | 10. D | 14. B | 18. B |
| 2. C | 7. C | 11. C | 15. B | 19. B |
| 3. C | 8. C | 12. B | 16. D | 20. B |
| 4. D | 9. D | 13. B | 17. B | 21. C |
| 5. B |      |       |       |       |

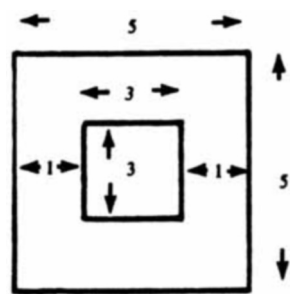
### Explanations

1. B



Maximum is 15 gaskets.

2. C



$$5^2 - 3^2 = 16 \text{ in.}^2$$

3. C

$$\frac{7}{7} = \frac{x}{8}$$

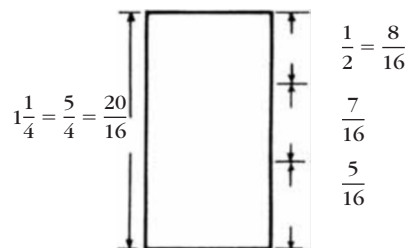
$$\frac{7}{8} = \frac{x}{8}$$

$$7 = \frac{7}{8}x$$

$$x = \frac{56}{7}$$

$$x = 8 \text{ threads}$$

4. D



3 washers.

5. B The movement on one pipe is compensated for by the movement on the other pipe.