Inverse Square Law

Numeric Response

1. A radiographic technique produces an exposure of 200 mR at a source-to-image receptor distance (SID) of 100 cm. What would the exposure be at an SID of 200 cm?

2. A radiographic technique produces an exposure of 60 mR at a source-to-image receptor distance (SID) of 36 cm. What would the exposure be at an SID of 72 cm?

3. A radiographic technique produces an exposure of 4 mR at a source-to-image receptor distance (SID) of 72 cm. What would the exposure be at an SID of 144 cm?

4. A radiographic technique produces an exposure of 900 mR at a source-to-image receptor distance (SID) of 30 cm. What would the exposure be at an SID of 90 cm?

5. A radiographic technique produces an exposure of 81 mR at a source-to-image receptor distance (SID) of 40 cm. What would the exposure be at an SID of 120 cm?

6. A radiographic technique produces an exposure of 270 mR at a source-to-image receptor distance (SID) of 10 cm. What would the exposure be at an SID of 30 cm?

7. A radiographic technique produces an exposure of 9 mR at a source-to-image receptor distance (SID) of 20 cm. What would the exposure be at an SID of 60 cm?

8. A radiographic technique produces an exposure of 160 mR at a source-to-image receptor distance (SID) of 20 cm. What would the exposure be at an SID of 80 cm?

9. A radiographic technique produces an exposure of 320 mR at a source-to-image receptor distance (SID) of 40 cm. What would the exposure be at an SID of 160 cm?

10. A radiographic technique produces an exposure of 200 mR at a source-to-image receptor distance (SID) of 200 cm. What would the exposure be at an SID of 100 cm?

11. A radiographic technique produces an exposure of 60 mR at a source-to-image receptor distance (SID) of 72 cm. What would the exposure be at an SID of 36 cm?

12. A radiographic technique produces an exposure of 4 mR at a source-to-image receptor distance (SID) of 144cm. What would the exposure be at an SID of 72 cm?

13. A radiographic technique produces an exposure of 20 mR at a source-to-image receptor distance (SID) of 60 cm. What would the exposure be at an SID of 20 cm?

14. A radiographic technique produces an exposure of 10 mR at a source-to-image receptor distance (SID) of 180 cm. What would the exposure be at an SID of 60 cm?

15. A radiographic technique produces an exposure of 9 mR at a source-to-image receptor distance (SID) of 120 cm. What would the exposure be at an SID of 40 cm?

16. A radiographic technique produces an exposure of 16 mR at a source-to-image receptor distance (SID) of 80 cm. What would the exposure be at an SID of 20 cm?

17. A radiographic technique produces an exposure of 1 mR at a source-to-image receptor distance (SID) of 160 cm. What would the exposure be at an SID of 40 cm?

18. A radiographic technique produces an exposure of 20 mR at a source-to-image receptor distance (SID) of 400 cm. What would the exposure be at an SID of 200 cm?

19. A radiographic technique produces an exposure of 0.5 mR at a source-to-image receptor distance (SID) of 20 cm. What would the exposure be at an SID of 10 cm?

20. A radiographic technique produces an exposure of 2 mR at a source-to-image receptor distance (SID) of 6 cm. What would the exposure be at an SID of 2 cm?

21. A radiographic technique produces an exposure of 10 mR at a source-to-image receptor distance (SID) of 8 cm. What would the exposure be at an SID of 2 cm?

22. A radiographic technique produces an exposure of 160 mR at a source-to-image receptor distance (SID) of 120 cm. What would the exposure be at an SID of 240 cm?

23. A radiographic technique produces an exposure of 90 mR at a source-to-image receptor distance (SID) of 30 cm. What would the exposure be at an SID of 90 cm?

24. A radiographic technique produces an exposure of 10 mR at a source-to-image receptor distance (SID) of 120 cm. What would the exposure be at an SID of 40 cm?

25. A radiographic technique produces an exposure of 1000 mR at a source-to-image receptor distance (SID) of 200 cm. What would the exposure be at an SID of 50 cm?

Inverse Square Law
Answer Section

NUMERIC RESPONSE

1. ANS: 50 mR

   PTS: 1
2. ANS: 15 mR

   PTS: 1
3. ANS: 1 mR

   PTS: 1
4. ANS: 100 mR

   PTS: 1
5. ANS: 9 mR

   PTS: 1
6. ANS: 30 mR

   PTS: 1
7. ANS: 1 mR

   PTS: 1
8. ANS: 10 mR

   PTS: 1
9. ANS: 20 mR

   PTS: 1
10. ANS: 800 mR

    PTS: 1
11. ANS: 240 mR

    PTS: 1
12. ANS: 16 mR

    PTS: 1
13. ANS: 180 mR

    PTS: 1
14. ANS: 90 mR

    PTS: 1

15. ANS: 81 mR

    PTS: 1
16. ANS: 256 mR

    PTS: 1
17. ANS: 16 mR

    PTS: 1
18. ANS: 80 mR

    PTS: 1
19. ANS: 2 mR

    PTS: 1
20. ANS: 18 mR

    PTS: 1
21. ANS: 160 mR

    PTS: 1
22. ANS: 40 mR

    PTS: 1
23. ANS: 10 mR

    PTS: 1
24. ANS: 90 mR

    PTS: 1
25. ANS: 16000 mR

    PTS: 1