Deciles for Ungrouped Data Total points = 47

17 20 23 25 28 28 32 32 35 37 41 46 47 48 51 52 55 55 56 60
$$\checkmark$$
 $n = 20$

1.
$$D_1 = \frac{1}{10}(n+1)_{th} \checkmark$$

 $D_1 = \frac{1}{10}(20+1)_{th} \checkmark$
 $D_1 = \frac{1}{10}(21)_{th} \checkmark$
 $D_1 = 2.1_{th} \checkmark$
 $D_1 = 20.3 \checkmark$

$$D_{1} = \frac{1}{10}(n+1)_{th} \checkmark \qquad D_{5} = \frac{1}{2}(21)_{th} \checkmark D_{1} = \frac{1}{10}(20+1)_{th} \checkmark \qquad D_{5} = 10.5_{th} \checkmark D_{5} = 39 \checkmark D_{1} = \frac{1}{10}(21)_{th} \checkmark \qquad 6. \quad D_{6} = \frac{6}{10}(n+1)_{th} \checkmark D_{1} = 20.3 \checkmark \qquad D_{6} = \frac{6}{10}(20+1)_{th} \checkmark D_{2} = \frac{2}{10}(n+1)_{th} \checkmark \qquad D_{6} = 12.6_{th} \checkmark D_{2} = \frac{2}{10}(20+1)_{th} \checkmark \qquad D_{6} = 46.6 \checkmark$$

2.
$$D_{2} = \frac{2}{10}(n+1)_{th} \checkmark$$

$$D_{2} = \frac{2}{10}(20+1)_{th} \checkmark$$

$$D_{2} = \frac{1}{5}(21)_{th} \checkmark$$

$$D_{2} = 4.2_{th} \checkmark$$

$$D_{2} = 25.6 \checkmark$$
3.
$$D_{3} = \frac{3}{10}(n+1)_{th} \checkmark$$

$$D_{6} = \frac{10}{5}(21)_{th} \checkmark$$

$$D_{6} = 12.6_{th} \checkmark$$

$$D_{6} = 46.6 \checkmark$$

$$7. D_{7} = \frac{7}{10}(n+1)_{th} \checkmark$$

$$D_{7} = \frac{7}{10}(20+1)_{th} \checkmark$$

$$D_{7} = \frac{7}{10}(21)_{th} \checkmark$$

$$D_{7} = 14.7_{th} \checkmark$$

$$D_{7} = 50.1 \checkmark$$

 $D_7 = 50.1 \ \checkmark$

$$D_{3} = \frac{3}{10}(20+1)_{th} \checkmark$$

$$D_{3} = \frac{3}{10}(21)_{th} \checkmark$$

$$D_{3} = 6.3_{th} \checkmark$$

$$D_{3} = 29.2 \checkmark$$
4.
$$D_{4} = \frac{4}{10}(n+1)_{th} \checkmark$$

$$D_{4} = \frac{4}{10}(20+1)_{th} \checkmark$$

$$D_{4} = \frac{2}{5}(21)_{th} \checkmark$$

$$D_{4} = 8.4_{th} \checkmark$$

$$D_{4} = 33.2 \checkmark$$
5.
$$D_{5} = \frac{5}{5}(n+1)_{th} \checkmark$$

8.
$$D_8 = \frac{8}{10}(n+1)_{th} \checkmark$$

$$D_8 = \frac{8}{10}(20+1)_{th} \checkmark$$

$$D_8 = \frac{4}{5}(21)_{th} \checkmark$$

$$D_8 = 16.8_{th} \checkmark$$

$$D_8 = 54.4 \checkmark$$
9. $D_9 = \frac{9}{10}(n+1)_{th} \checkmark$

$$D_9 = \frac{9}{10}(20+1)_{th} \checkmark$$

5.
$$D_5 = \frac{5}{10}(n+1)_{th} \checkmark$$

$$D_5 = \frac{5}{10}(20+1)_{th} \checkmark$$

9.
$$D_9 = \frac{9}{10}(n+1)_{th} \checkmark$$

$$D_9 = \frac{9}{10}(20+1)_{th} \checkmark$$

$$D_9 = \frac{9}{10}(21)_{th} \checkmark$$

$$D_9 = 18.9_{th} \checkmark$$

$$D_9 = 55.9 \checkmark$$

Total points = 47 23 25 28 32

17 20 23 25 28 28 32 32 35 37 41 46 47 48 51 52 55 55 56 60
$$\checkmark$$
 $n = 20$ \checkmark

Deciles for Ungrouped Data

1.
$$D_{1} = \frac{1}{10}(n+1)_{th}$$
 \checkmark $D_{5} = \frac{1}{2}(21)_{th}$ \checkmark $D_{5} = 39$ \checkmark $D_{1} = \frac{1}{10}(21)_{th}$ \checkmark $D_{5} = 39$ \checkmark $D_{1} = 2.1_{th}$ \checkmark $D_{1} = 20.3$ \checkmark $D_{1} = 20.3$ \checkmark $D_{2} = \frac{2}{10}(n+1)_{th}$ \checkmark $D_{3} = \frac{1}{5}(21)_{th}$ \checkmark $D_{4} = \frac{3}{10}(21)_{th}$ \checkmark $D_{5} = 39$ \checkmark $D_{6} = 39$ \checkmark $D_{7} = 39$ \checkmark $D_{1} = 20.3$ \checkmark $D_{1} = 20.3$ \checkmark $D_{2} = \frac{1}{2}(20+1)_{th}$ \checkmark $D_{2} = \frac{2}{10}(20+1)_{th}$ \checkmark $D_{3} = \frac{3}{10}(20+1)_{th}$ \checkmark $D_{4} = \frac{3}{5}(21)_{th}$ \checkmark $D_{5} = 39$ \checkmark $D_{5} = 39$ \checkmark $D_{6} = 30$ $(n+1)_{th}$ \checkmark $D_{6} = \frac{6}{10}(n+1)_{th}$ \checkmark $D_{6} = \frac{6}{10}(20+1)_{th}$ \checkmark $D_{6} = \frac{6}{10}(20+1)_{th}$ \checkmark $D_{6} = \frac{3}{5}(21)_{th}$ \checkmark $D_{7} = \frac{3}{5}(21)_{th}$ \checkmark $D_{7} = \frac{7}{10}(n+1)_{th}$ \checkmark $D_{7} = \frac{7}{10}(20+1)_{th}$ \checkmark $D_{7} = \frac{7}{10}(21)_{th}$ \checkmark $D_{7} = \frac{7}{10}(21)_{th}$ \checkmark $D_{7} = 50.1$ \checkmark $D_{7} = 50.1$ \checkmark $D_{7} = 50.1$ \checkmark $D_{8} = \frac{8}{10}(20+1)_{th}$ \checkmark $D_{8} = \frac{8}{10}(20+1)_{th}$ \checkmark $D_{8} = \frac{4}{5}(21)_{th}$ \checkmark $D_{8} = \frac{4}{5}(21)_{th}$ \checkmark $D_{8} = 54.4$ \checkmark $D_{9} = \frac{9}{10}(n+1)_{th}$ $O_{9} = \frac{9}{10}(n$

 $D_4 = 33.2 \checkmark$

5. $D_5 = \frac{5}{10}(n+1)_{th} \checkmark$

 $D_5 = \frac{5}{10}(20+1)_{th}$ <

Deciles for Ungrouped Data Total points = 47

| $n=20$ \checkmark | | | | | | | | | | | |
|---------------------|----|----|----|----|----|----|----|----|----|----------|--|
| 41 | 46 | 47 | 48 | 51 | 52 | 55 | 55 | 56 | 60 | √ | |
| 17 | 20 | 23 | 25 | 28 | 28 | 32 | 32 | 35 | 37 | | |

1.
$$D_1 = \frac{1}{10}(n+1)_{th} \checkmark$$

$$D_1 = \frac{1}{10}(20+1)_{th} \checkmark$$

$$D_1 = \frac{1}{10}(21)_{th} \checkmark$$

$$D_1 = 2.1_{th} \checkmark$$

$$D_1 = 20.3 \checkmark$$

 $D_5 = \frac{3}{10}(20+1)_{th} \checkmark$

$$D_{5} = \frac{1}{2}(21)_{th} \checkmark$$

$$D_{5} = 10.5_{th} \checkmark$$

$$D_{5} = 39 \checkmark$$

$$D_{6} = \frac{6}{10}(n+1)_{th}$$

6.
$$D_6 = \frac{6}{10}(n+1)_{th} \checkmark$$

$$D_6 = \frac{6}{10}(20+1)_{th} \checkmark$$

$$D_6 = \frac{3}{5}(21)_{th} \checkmark$$

$$D_6 = 12.6_{th} \checkmark$$

$$D_6 = 46.6 \checkmark$$

 $D_9 = 55.9 \checkmark$

2.
$$D_{2} = \frac{2}{10}(n+1)_{th} \checkmark$$

$$D_{2} = \frac{2}{10}(20+1)_{th} \checkmark$$

$$D_{2} = \frac{1}{5}(21)_{th} \checkmark$$

$$D_{2} = \frac{1}{5}(21)_{th} \checkmark$$

$$D_{2} = 4.2_{th} \checkmark$$

$$D_{2} = 25.6 \checkmark$$

$$D_{3} = \frac{3}{10}(n+1)_{th} \checkmark$$

$$D_{3} = \frac{3}{10}(20+1)_{th} \checkmark$$

$$D_{4} = \frac{3}{5}(21)_{th} \checkmark$$

$$D_{5} = \frac{7}{10}(n+1)_{th} \checkmark$$

$$D_{7} = \frac{7}{10}(20+1)_{th} \checkmark$$

$$D_{7} = 14.7_{th} \checkmark$$

$$D_{7} = 50.1 \checkmark$$

$$D_{8} = \frac{8}{10}(n+1)_{th} \checkmark$$

$$D_{8} = \frac{8}{10}(n+1)_{th} \checkmark$$

2.
$$D_2 = \frac{1}{10}(n+1)_{th} \checkmark$$
 $D_2 = \frac{2}{10}(20+1)_{th} \checkmark$
 $D_2 = \frac{1}{5}(21)_{th} \checkmark$
 $D_2 = \frac{1}{5}(21)_{th} \checkmark$
 $D_2 = 4.2_{th} \checkmark$
 $D_2 = 25.6 \checkmark$

3. $D_3 = \frac{3}{10}(n+1)_{th} \checkmark$
 $D_3 = \frac{3}{10}(20+1)_{th} \checkmark$
 $D_3 = \frac{3}{10}(20+1)_{th} \checkmark$
 $D_3 = \frac{3}{10}(21)_{th} \checkmark$
 $D_4 = \frac{4}{10}(n+1)_{th} \checkmark$
 $D_4 = \frac{4}{10}(20+1)_{th} \checkmark$
 $D_4 = 8.4_{th} \checkmark$
 $D_4 = 33.2 \checkmark$

5. $D_5 = \frac{5}{10}(n+1)_{th} \checkmark$
 $D_6 = 12.6_{th} \checkmark$
 $D_6 = 12.6_{th} \checkmark$
 $D_6 = 46.6 \checkmark$

7. $D_7 = \frac{7}{10}(n+1)_{th} \checkmark$
 $D_7 = \frac{7}{10}(20+1)_{th} \checkmark$
 $D_7 = 14.7_{th} \checkmark$
 $D_7 = 50.1 \checkmark$

8. $D_8 = \frac{8}{10}(n+1)_{th} \checkmark$
 $D_8 = \frac{8}{10}(20+1)_{th} \checkmark$
 $D_8 = \frac{8}{10}(20+1)_{th} \checkmark$
 $D_8 = \frac{4}{5}(21)_{th} \checkmark$
 $D_8 = 54.4 \checkmark$
 $D_9 = \frac{9}{10}(20+1)_{th} \checkmark$
 $D_9 = \frac{9}{10}(20+1)_{th} \checkmark$
 $D_9 = \frac{9}{10}(21)_{th} \checkmark$
 $D_9 = \frac{9}{10}(21)_{th} \checkmark$
 $D_9 = \frac{9}{10}(21)_{th} \checkmark$
 $D_9 = \frac{9}{10}(21)_{th} \checkmark$

Deciles for Ungrouped Data Total points = 47

 $D_9 = \frac{9}{10}(20+1)_{th} \checkmark$

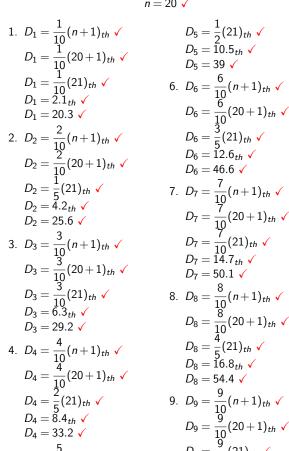
 $D_9 = \frac{9}{10}(21)_{th} \checkmark$ $D_9 = 18.9_{th} \checkmark$

 $D_9 = \frac{9}{10}(21)_{th} \checkmark$ $D_9 = 18.9_{th} \checkmark$

 $D_9 = 55.9 \checkmark$

 $D_9 = 55.9 \checkmark$

| 17 | 20 | 23 | 25 | 28 | 28 | 32 | 32 | 35 | 37 | | |
|-----------------|---------------------|------------------|--------------------|----|---|----|----|----|----|--|--|
| 41 | 46 | 47 | 48 | 51 | 52 | 55 | 55 | 56 | 60 | | |
| <i>n</i> = 20 ✓ | | | | | | | | | | | |
| 1. <i>E</i> | $O_1 = \frac{1}{1}$ | $\frac{1}{0}(n+$ | 1) _{th} ✓ | | $D_5 = \frac{1}{2}(21)_{th} \checkmark$ | | | | | | |
| | | _(20 _ | | | $D_5 = 10.5_{th} \checkmark$ | | | | | | |



5. $D_5 = \frac{5}{10}(n+1)_{th} \checkmark$

 $D_5 = \frac{5}{10}(20+1)_{th} \checkmark$