PEMDAS worksheet (with exponents)

Step 1: Parenthesis (): Solve all problems in parenthesis FIRST.
Step 2: Exponents: Next solve any numbers that have exponents.
Step 3: Multiply or Divide: Then solve any multiplication or division problems (going from left to right).
Step 4: Add or Subtract: Finally solve any addition or subtraction problems (going from left to right).

Solve the following problems using PEMDAS

1. $8^2 \div (9 - 5)$

2. $(-5)^2 - 2 \times (-9) + 6$

3. $3 \times 10 + 80 - 4^2$

4. $4 \times (-6) \div 8 + 3^3$

5. $(-3)^3 - 2 + 8 \div (-8)$

6. $6 \times (2 - 2 + 5^3)$

7. $5^2 + 6^2 \div 9$

8. $5 + 7^2 + 2 - 2$

9. $4 \times 4 + 4 \times 2^3 \times 8$

10. $2^2 \times 2 \times 8^2 + 6$

11. $3 \times 7^2 \times 3 \div 1^3 \div 3$

12. $1^3 \times 9 + 8 - 8$

13. $4^3 + 5 \div 5$

14. $6 + 9 \times 3^2 - 5 - 1$

15. $6^2 - 6 + 2 + 1$

16. $2^3 \times 3 \times 6 \div 2$

17. $2^3 + 5 + 8^2 - 9$

18. $11 + 11 - 6^2 \div 2$

19. $7 \times (8 \div 4)^2$

20. $(9 + 3^2) \times 10 \div 2$

Ans. (1) 16   (2) 49   (3) 22   (4) 24   (5) -30   (6) 750   (7) 29   (8) 54   (9) 272   (10) 518

(11) 147   (12) 9   (13) 65   (14) 81   (15) 33   (16) 72   (17) 68   (18) 4   (19) 28   (20) 90