Homework 27, Section 5.2: 1, 3, 6, 7, 15, 22, 26(a,b)

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Homework

1. A)

 $6^{10} = 60, 466, 176$

1. B)

 $5^{10} = 9,765,625$

3. A)

 $26 \cdot 26 \cdot 26 \cdot 10 \cdot 10 \cdot 110 \cdot 10 = 175,760,000$

3. B)

 $10 \cdot 10 \cdot 10 \cdot 10 \cdot (26 \cdot 26 \cdot 26 - 97)$

6. A)

 $P(17,3) = 17 \cdot 16 \cdot 15 = 4080$

6. B)

 $16 \cdot 16 \cdot 15 = 3840$

6. C)

 $(1+1+15)+15\cdot 16\cdot 16=3855$

6. D)

 $1 \cdot 15 \cdot 16 = 240$

15. A)

 $50 \cdot 50 \cdot 50 = 125,000$

15. B)

$$50 \cdot 49 \cdot 48 = 117,600$$

15. C)

$$50 \cdot 50 = 2500$$

15. D)

$$3 \cdot (50 \cdot 49) = 7350$$

22. A)

$$2^7 = 128$$

$$2^7 = 128$$

$$2^4=16$$

$$128 + 128 - 16 = 240$$

26. A)

$$15 \cdot 16 \cdot 17 \cdot 18 \cdot 19 = 1,395,360$$

26. B)

$$1 \cdot 2 \cdot 3 \cdot 4 \cdot 5 \cdot 6 = 720$$