

Differences between the 6th and 8th editions of “Fundamentals of Engineering Thermodynamics” by Moran & Shapiro.

6 th Edition	8 th Edition	Differences
5.1		
5.2		8 th edition includes “Alternative Second Law Pathway” learning strategy (p.248)
5.3		8 th edition includes a section about Pipe Friction (p.251-252). Also, 8 th edition provides example of an external irreversibility (p.254)
5.4		8 th Edition includes information about thermal gliders (p.255-256)
5.5		
5.6		
5.7		
5.8		
5.9		Examples 5.1 & 5.3 differ between the editions.
5.10		
5.11		
6.1		
6.2		
6.3		
6.4		
6.5		
6.6		
6.7		
6.8		The different editions have different “HORIZONS” feature stories (p.316)
6.9		
6.10		
6.11		
6.12		6 th Edition includes a box of information titled “Energy & Environment” (energy requirements of energy star products)
6.13		6 th Edition includes a box of information titled “Energy & Environment” about coal while the 8 th Edition instead includes a box called “Bioconnections” (p.341) about bats
8.1		There are two differences. First, there is a whole section about “Introducing power generation” from pp. 438- 442 in the 8th edition that does not appear in the 6th edition. Second there are three figures and several paragraphs about pressurized-water nuclear vapor power plants, concentrating solar thermal vapor power, and geothermal vapor power, from pg. 442- 445 in the 8th edition that does not appear in the 6th edition.
8.2		Much of the discussion of p.445-446 (up to the turbine section) does not appear in the 6 th edition. Differing Energy & Environment sections (update on coal waste)
8.3		
8.4		
9.1		Editions have different “Energy and Environment” Sections
9.2		
9.3		

9.4		8 th edition has updated Horizon section about biodiesel
9.5		8 th edition added paragraph about different types of fuels (p.525) 8 th edition has added energy and environment section (p.526)
9.6		
9.7		
9.8		Examples 9.10 in both editions are slightly different, point D in fig E9.10 is not along the T=c line in 8 th edition Example 9.11 in the 8 th edition additionally asks for the total rate energy added by heat transfer
9.9	9.11	8 th edition adds Considering Compressible Flow through Nozzles and Diffusers section (p.566)
10.1		
10.2		
10.6		8 th edition includes additional example 10.4 (p.631)
10.7		8 th edition included additional section 10.7.3 on automotive air conditioning (p.638)
11.1		
11.4		
11.5		8 th edition includes additional bioconnections section (p.682)
11.7		
12.1		
12.2		6 th edition includes a closing comment on Dalton and amagat models (p.648)
12.3		8 th edition includes table of property relations (p.739)
12.4		
12.5		8 th edition has slightly different wording of paragraphs at top of page 756 (8 th) 667(6 th) 8 th edition include bioconnections section
12.6		
12.7		
12.8		6 th edition includes modeling summary (p.679) 8 th edition includes fig E12.11b (p.775) fig E12.12b (p.777) 8 th edition includes eqn 12.57 and discussion (p.782)
12.9		
13.1		6 th edition contains additional energy and environment section (p.712)
13.2		Examples 13.5 in each edition are different 6 th edition contains discussion of condensation of combustion products (p.727)
13.3		
13.4		Discussion of fuel cells is different between editions (p.832) 8 th 8 th has updated horizons section 8 th has new fig 13.3 (p.834) (basically, the entire section is updated)
13.5		
14.1		
14.2		
14.3		8 th edition includes horizons section on greenhouse gas (p.898)

14.4		
14.5		
14.6		Example 14.10 slightly different schematic and problem statement (p.911) 8 th